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THE

# ILLINOIS FARMER,

A Monthly Agricultural Journal,

AGRICULTURAL  
EXPERIMENT STATION  
NOV 6 1880

UNIVERSITY OF ILLINOIS

DEVOTED TO THE INTEREST OF THE

FARMER, GARDENER, FRUIT GROWER AND STOCK RAISER.

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M. L. DUNLAP, Editor.

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VOLUME VII., 1862.

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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, JANUARY 1862.

NO. 1.

## January.

We take up our pen to write of the new year and its duties. We return our thanks to Him, who wheels this orb in its mysterious course and continues us in health, to enjoy its various seasons, and to perform the tasks that have become our patrimony. To us the changes of the seasons are all full of interest, whether binding the wheat beneath the ardent gaze of the August sun, or wielding the axe under the frosty zone of regal winter.

To us, the culture of the soil is a labor of love, from the turning of the furrow, the springing of the tiny plant, through all its stages to the ingathering of its matured products. For long years we were pent up in the counting room, or following the pointing of the compass in tracing the boundaries of thousands of homesteads. These were arduous duties, a continual grinding down of the vigor of body, and wearing out the enjoyment of the mind; sines and co-sines, tangents, arcs and secants, weary and grow stale; ledgers and day books pall upon the mind, but in rural pursuits there is a never-ending variety, and a mind that has a love for the beautiful and would enjoy the good things of life, can find it on the farm, in the garden and the orchard more surely than in the workshops or the busy marts of trade, where the weak are trampled into the dust or ground to pieces beneath the moving columns who grasp after fortunes made suddenly, which, like the apples of the Dead Sea, are full of bitter ashes.

The work shops must be filled, trade

must be fostered, but let us assure our young readers, who see no pleasure in farming, and wish to make a change, that they should make no hasty choice. If one has a taste for the arts, for mechanics, or for trade, let him follow it, for that which accords with his taste is in general best for him, but if he inter these departments simply to have an easier or more pleasant task, he will find when too late that he is mistaken.

The miser who gloats over his gold, the politician who sacrifices honor, the tradesman who trusts to chance, and the farmer who has no love of the beautiful are alike objects of pity.

It is true that a large number of our farmers have few comforts, and their families less pleasure, but this is their own fault. With a teeming soil like ours there is no excuse not to have at this season of the year an abundant supply of vegetables, if not of fruits, with everything snug for the winter. Certainly, that farmer can have little enjoyment when his horses are exposed to currents of cold air through a defective stable, whose cows are huddled together under the lea of a friendly fence, or whose swine squeal out their dissatisfaction at lying on the frozen ground.

The pleasure of farming does not consist in a large number of acres half cultivated, nor in a house standing out in the sun and wind, without the surrounding of tree or flowers, but in the beautifying of the homestead, and the comforts and conveniences that should adorn it. With a pleasant home boys will not have such a longing desire to go into other pursuits, or the daughters wish

A. D. 1833

to marry the village beaux. With such a kindly soil and genial climate, the western farmer had ought to be the most independent, and enjoy the pleasures of life to the fullest extent. It is the task of the ILLINOIS FARMER, not only to teach how to make farming profitable, but to give it a higher position than mere dollars—how to earn and how to use money, so as to insure the best possible returns.

Invoking the aid of the Great Giver, and asking the forbearance of our readers for any short comings, we wish one and all of our readers a happy, thrice happy new year.

### In Memory of Edward D. Baker.

BY RAYARD TAYLOR.

Oh, fallen he o, noble friend,  
'Tis not the friend I mourn in thee,  
Though called, in mid career, to end  
Thy shining course of victory.

I dare not grieve, for friendship's sake,  
To know thy soldier's knell is rung—  
That shame or glory near shall wake  
The silver trumpet of thy tongue.

That dim eye whose lightning seared  
The traitor, through his brazen mail:  
The lips, whose smile of sweetness cheered  
Our darkest day, are cold and pale.

No selfish sorrow fits thee now,  
And we who loved thee stand a tide  
While she, our mother veils her brow,  
And in her grief forgets her pride.

When half the stars of honor fade  
That gemmed her banner's morning sky,  
She sees them triumph, who betrayed,  
And he, her truest chieftain die!

When low ambition rules the land,  
And patriots play the traitor's part,  
We'll spare his open hand  
We'll spare his honest heart.

When timid lips proclaim their doubt,  
To chill the ardor of the brave,  
We miss his dauntless battle-shout,  
That never truce to treason gave.

When Freedom's case apostles preach  
Dis-honor in the sacred name  
Of Peace, his grand, indignant speech  
No more shall smite the towering shame!

God! thou hast sheathed the sword he drew:  
We bow before thy dark decree:  
But give the arms that build anew  
Our Nation's temple, strength from Thee!

—N. Y. Tribune.

A member of the Academy of Sciences, of Paris, has discovered a simple and unexpensive process for rendering muslins, laces and all sorts of light stuffs incombustible. It simply consists of adding to the starch used in stiffening them one half its weight of the carbonate of lime, usually known as "Spanish White."

[From the Chicago Tribune.]

### The Culture of Cotton on the Prairie.

*Cotton on the Prairie—Three Thousand Acres to be Planted next Year in one County in this State.*

Many of the readers of the *Tribune* are aware that cotton has been and continues to be grown in small quantities in the south part of this State, and that in the early settlement of the central portion, it was also successfully grown by almost every family. Most people take it for granted that the climate is unsuited to its profitable production, hence the discontinuance of its culture. This is a great mistake, for with the same propriety we might say that castor beans and hemp, which have been extensively grown, were discarded from the same cause.

In the early settlement of the Sangamon country, now better known under the name of Central Illinois, cotton was cultivated on nearly every farm, and was worked up into clothing and bedding by hand, and the domestic *linseys* made of native cotton and wool for a long time filled an important place in every country store, and even up to 1840, thousands of yards of it were sold in the city of Chicago, brought from the central portion of the State by the farmers, whose wives and daughters carded the cotton by hand, and spun it upon the *big wheel*—wove and dyed it by the kitchen fire. Steam on the lakes and rivers so cheapened transportation that other products paid a better profit, together with the low price of cotton and cotton goods at that time, so that its culture was no longer an object. The castor bean was the immediate successor of cotton, requiring about the same amount of labor to prepare it for market; next, corn and hemp, which has given place to the great variety of farm and orchard products. Thus it will be seen that the laws of trade have driven out three important staples within the last thirty years. When the culture of cotton was discontinued the price had become reduced to six cents a pound, and domestic sheeting to about the same price per yard. Now, the price of both are more than double that amount, while the staples that drove them from the field are cheapened in the market. It is, therefore, evident that this is a favorable time to resume its culture, while it is probable that the castor bean and hemp may at no distant day be again on change. Under this state of things, to say nothing of the rebellion that at

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this time is cutting off our supply of cotton, it is of the first importance that we take into consideration the propriety of again placing it among the staple products of the great prairie slopes. During the present season we have lost no opportunity to become conversant with the history of cotton growing in our State, and of the propriety of recommending its planting on a large scale. We have come to the deliberate conclusion that in all parts of the State south of 40° of latitude, the cotton plant will flourish, and is as certain of a good crop as corn and wheat. Last week we made a visit to Christian county to examine a cotton field of ten acres, three miles from the village of Assumption, on the main line of the Illinois Central Railroad. This field was planted early in May, but from the unskillfulness of the planting, the seed failed to germinate, and it was not until the 17th day of June, that the seed could be obtained to re-plant it. Notwithstanding this late planting the crop is a fair one, estimated at three hundred pounds to the acre. The growth of the plant was vigorous, and had it not been for the late planting, which has allowed only one picking, the crop would have come fully up to the best yield of Tennessee upland. So confident is the planter of its success and resulting profit that he is making arrangements to plant two thousand acres next spring, while other parties in the neighborhood have engaged to plant one thousand acres in addition, making three thousand acres near this section. If seed can be had in time, the planting will extend through the neighboring counties as far north as this county, where several parties are making arrangements for seed to plant five to ten acres each.

Seed from the uplands of Tennessee will be used as the best adapted to this climate, producing what is called a short staple upland. We have samples of the cotton grown on the plantation mentioned, which is of excellent quality.

Arrangements are also making at Assumption for the necessary buildings and machinery for ginning and baling three thousand bales the coming autumn. [A bale is four hundred pounds.] This settlement is largely composed of Canadian French, and some eighty farmers among them will at once enter upon its culture, putting in an average of twelve acres each. This will not interfere with their other farm crops, and at the same time will give them an opportunity to become familiar with the routine of its culture and preparation for market.

An old Tennessee cotton planter has resided

within thirty miles of Assumption during the past twenty-seven years, and has grown more or less cotton each year, since he came into the country; he says that during that time he has not failed in a single crop of cotton, though he has failed in both corn and wheat. He further says that on the prairie the plant grows larger and will produce full as large a crop as Tennessee upland, the superiority of the soil fully making up for the difference in climate. For the first few years he cultivated it largely, but the castor bean soon superseded it, and since that time he has only grown it for family use, and continues to dress in home made linsey.

The culture of cotton is almost as simple as that of corn, and with our improved implements, will cost little more per acre than that crop. The additional labor will be thinning the plants in the row, which must be done with the hand-hoe, but on the prairie the necessity of repeated hoeings, to keep down the weeds that is given to the crops at the South, can be mainly dispensed with, on the same ground that we dispense with it in corn culture over that of the New England farmer.

When sorghum was first introduced it was supposed that it was only adapted to the sugar States, but it has proved to be best adapted to the States north of the Ohio, and after seven years of doubt and experiment, has taken its place among the important staples of the State. Thirty years of experience have proved that the upland cotton of Tennessee and Arkansas is both hardy and productive with us, and the only question to consider is whether it will pay as well as other farm crops. When the price of good upland cotton went down to five or six cents a pound, and that of castor beans was a dollar a bushel, the beans took the lead and cotton was thrown out. But now, with our clipper plows, two horse cultivators and iron rollers, there is no reason why we cannot compete with the bar shire plow, the nigger hoes, and the unskillful labor of the Southern cotton States. We believe that at eight cents a pound that it will prove to be one of our best paying crops.

Efforts are being made to procure an abundant supply of seed for the next planting, which will be advertised in due time. It will be sold at cost, whatever that may be, as the gentlemen engaged in procuring it are actuated more by patriotic than money-making motives. Those desiring small lots of seed can obtain them through the station agent at Assumption.

No person not accustomed to the growing of

cotton should at once enter largely upon its culture, for like all semi-tropical plants in the early stages of its growth, the plant is exceedingly delicate, and requires that the soil be put in the best possible condition. It is useless to put in the crop in cloddy ground, or neglect it in the early stages of its growth. In our next we will give directions as to its culture, and an account of its insect enemies at the South, which there endanger the crop, and are more to be feared than the frosts of the North.

#### HABIT OF THE PLANT.

In the early stages of its growth, cotton is an exceedingly delicate plant, and will not bear to be crowded by weeds, choked with unpulverized lumps of soil, or soaked with standing water. We need not be told that, with such habits of the plant, the soil must first be made friable; that if the land is cloddy, it must be reduced to fineness by thorough pulverization; nor that the furrows shall be deep, so as to absorb and drain off the falling rain. The farmer who attempts the culture of cotton near the limits of its growth, must be a thorough cultivator, for in the hands of a shiftless farmer the crop will prove a complete failure. Corn may be neglected and yet yield, in proportion to the labor bestowed upon it, ten, twenty or fifty bushels; but not so of cotton, the crop must be either a fair one or a failure. The plant is semi-tropical in its nature, and from the time of planting to its final growth, must be pushed ahead with the utmost vigor, and under no pretext will it do to neglect it.

#### TIME OF PLANTING.

The cotton plant will sustain a greater degree of frost than corn without being cut to the ground, but after leaving been once cut down by frost, unlike corn, it will not recover, and consequently must be re-planted. The present season has demonstrated that planting as late as the 14th of June in Christian county, will give one picking of excellent cotton the last of September, but the bolls for the second picking will not be sufficiently developed to be opened by the October frost; hence, it is important that the plants get an early start, so as to obtain at least two pickings.

The cotton plant in its habits of growth is similar to the castor bean. The latter in the South is a tree of a foot in diameter, while at the North it becomes an annual; but with this great disparity of growth, with a rich soil and thorough culture, it is successfully cultivated at

the North, and at one time bid fair to be the great leading agricultural staple of the State. In the tropics the cotton plant is of two kinds—the tree cotton and the herbaceous, the former producing the largest crops, often six hundred pounds of clean cotton to the acre, while the latter seldom exceeds two hundred. In the temperate zone the herbaceous or annual cotton plant improves in both quality or quantity, and sometimes rivals that of the tree cotton in yield. In looking over the statistics of the cotton-producing countries, it will be seen that along the northern line of its culture the yield and quality are both the most satisfactory. Indian corn is another example of a wide range of climate, and which at the South can be planted at almost all season of the year, but while at the North the planting is confined to a few days, the quantity and quality of the soil is superior. We could name other products, but will be content with one more, the imphee of Africa. No where does the castor bean, Indian corn and the imphee flourish more luxuriantly and produce better returns than in Central Illinois. Experience and analogy both prove that well tended cotton will not fail to produce a like result. The cultivation of the castor bean, of Indian corn, and of the imphee, we know and appreciate the value and necessity of early planting, so as to push the growth of the plant forward before the dry season, which is so liable to occur during August and September. Late planted corn will produce a small show of ears and is valuable for fodder, and, taking the two objects together, is often a paying investment; but with cotton the case is different, the late planted will only produce a small return of bolls, while the stalks and leaves, unlike that of corn, are of no value. When we take into consideration that the late planting will require nearly the same amount of labor per acre, with the certainty of a scanty yield, it becomes at once self evident that early planting is the only advisable course to be pursued. In the south part of the State, where cotton has been grown from the time of its first settlement from the States of Kentucky and Tennessee, to the present time, no particular pains have been taken to produce large yields per acre by early planting, and hence we find that they generally plant in May, about the time of the heading out of the winter wheat. We were at Cobden the 18th of June last, and in the garden of Mr. Ben. Vancil the plants were in the first leaf, and at this time the wheat had been some days in shock. Mr. V. has spent a long life in that



part of the State, and has always grown cotton for his family clothing, and as one picking furnishes an abundant supply for this purpose, he is content to do his planting after the hurry of the spring work. We are thus particular on this point, for it is one of the main points to success, and cannot with safety be overlooked.

Although cotton has been grown for a long time in the State, yet it has been of garden rather than field culture, and we may be safe in saying that the crop noticed in our last article is the first one on anything like an extended scale, and that most unerringly points to the absolute necessity of early planting. This garden culture fully accounts for the want of a more intimate general knowledge of the best time to plant, and of the amount of the yield. As one picking was sufficient for all the needs of the family, it was not necessary to double the yield, by extra care in preparing the ground, to run the risk of spring frosts that might add to the labor of re-planting, and would require more labor in weeding out the plants, as it is well known that corn planted in April requires more labor per acre to keep down the weeds than if planted the first of June, though at the same time, the early planted will return the greatest net proceeds for the outlay, when fodder is not taken into the account.

In Champaign county, corn planting usually commences the 25th of April, and is continued as late as the 20th of June, though little of the late planted will ripen in ordinary seasons. From the 1st to the 20th of May is the favorite time of planting, and it is seldom begun or continued later than that, by only those who have large fields to put in, or are delayed by heavy rains. We would, therefore, recommend the same time as the best for the planting of the cotton, and for all points south a corresponding earlier season. It is true that the farmers in the basin of Upper Egypt do not plant before we do; yet at the same it is well known that their crops are similar to our late ones, and seldom come up to an average crop.

The plant will be from six to ten days in appearing above ground, and as we seldom have heavy frosts later than the 10th of May, we can, with good assurance of success, commence a week or ten days before this time, but even then we shall occasionally have to re-plant; but then the extra expense will be only a thorough harrowing of the surface to kill the up-springing weeds, and the re-planting, which, at best, cannot be very expensive.

#### PREPARATION OF THE SOIL.

So far as we can learn, the practice has been to plow the ground in the spring, but as this is the universal practice with all spring crops, in that part of the State where cotton has been grown, we may take it for granted that the benefits of fall plowing have not been properly considered. Experience has proved that on our own prairie soils the action of the winter frost on fall plowed land is highly favorable in weathering it down to a friable condition. In the case of the cotton plant this is especially desirable, from the delicacy of its growth at its early stages. The soil must not only be finely comminuted, but it must be deeply mellow, so that a heavy rain will at once sink below the roots of the young plant, otherwise it is liable to destruction by an excess of moisture. From the good effects of fall plowing for similar crops, we are so strongly impressed with its value, that we would recommend and urge fall plowing for this crop. Let the plowing be deep, say eight inches, and if it be followed with a subsoil plow, breaking up the bottom four or six inches more, all the better; if anywise level, it will be better thrown into narrow lands. We would not re-plow in the spring, but give the surface a good stirring with a two horse cultivator, at the time of planting. If the winter frost had failed to soften the entire surface, an iron roller should be passed over before the cultivator, to crush down the lumps. When manure is used it can be spread upon the surface of the fall plowed land at any time during the winter when the surface is frozen, but at any other time we would not like to drive the team with a loaded wagon over it. The manure will, of course, become incorporated in the soil in the subsequent working of the surface. If the plowing is delayed until spring, the same course should be pursued in regard to it, and the roller will prove to be an indispensable implement, always to be followed with the harrow or cultivator.

#### THE SEEDING.

At the South a large amount of seed is used, not so much to insure a good stand for the amount used is greatly in excess of this, but as a manure for the young plants. As seed is abundant and of little value for other purposes, and as manure is scarce, this liberal use of seed may well be excused; but at the present, when seed is scarce, a bushel properly planted will be ample for five or six acres. From the lightness of the seed and the adhering cotton, it is not posi-

tive that it can be planted with any of our seed planters now in use; and if not, hand planting must be resorted to. To do this the rows must be laid off with a common corn marker, five feet wide, but they must not be deep, for the seeds of cotton on our soil must be planted shallow, not over one inch deep. Drop six or eight seeds in a hill, with the hills eighteen inches apart in the rows. Cover with a harrow and finish with a roller.

#### CULTURE.

In from six to ten days the young plants will appear above the ground, and at the same time the seeds of weeds will not have been found idle; and as soon as the rows can be followed, the team must be put to work. Use a two horse cultivator, several kinds of which are now made, or treat it similar to broom corn. The two-horse cultivator that we use is well calculated for the work while the plant is small, but for subsequent workings probably no better than others. All weeds must be taken out from about the plants, and at the second hoeing all but one of the plants cut out, so that the plants will stand one in a hill eighteen inches apart. The crop will need continual workings, with the double shovel plow and cultivator, one or both, and the first two workings will need looking after with a hoe, to thin out the plants and to keep the weeds down about them, for it must be remembered that the plant is not strong like corn, in the early part of the season, but when it does take a start in earnest, it is exceedingly vigorous.

#### SOIL, ETC.

The soil should be such as is well adapted to wheat, well drained, or free from standing water. It is not to be recommended to those not already acquainted with its culture, to go into it largely at once, for experience in all new things of the kind is needed, and there are, doubtless, yet much to learn in regard to its culture; but we have confidence that Northern energy and Northern ingenuity will overcome all obstacles in the way, and that at no distant day the cotton, the castor bean, and sorghum, will take their places beside the other great staples of the prairies.

#### RURAL.

Since writing the above, for the *Tribune*, we have received the following note with a beautiful sample of cotton inclosed:

NOVEMBER, 1861.

M. L. Dunlap, Urbana—Dear Sir:—I send you a sample of cotton raised in Urbana the past

summer by Isham Vest. Mr. V. came from North Carolina over twelve months since. He found among his things a lock of unpicked cotton; he got the seed and planted them very late last spring. He raised from less than a dozen seed over one hundred bolls of fully ripe cotton; this sample came from one boll. He is sanguine with the belief that cotton can be raised here with entire success. Yours truly,

W. D. SOMERS.

We learn that a supply of cotton seed will be ready for sale at most of the stations on the I. C. R. R. in time to plant. There is no speculation in this seed business, as it is to be sold at cost to the planter. It will be the pure upland Tennessee. Do not, therefore, be the dupes of speculators and pay ten prices for the seed.

We hope that at least one person in every neighborhood in Central Illinois will plant at least an acre of cotton the coming spring for the purpose of giving it a fair trial, to become accustomed to its culture and to test the actual cost per pound of the clean cotton. It will be borne in mind that three hundred pounds of seed cotton will make about one hundred pounds of ginned cotton.

ED.

CHEMICAL ODDITY.—While an ignorant lecturer was describing the nature of gas, a blue-stocking lady of a gentleman near her, inquired the difference between oxygen and hydrogen? "Very little, madam," said he; "by oxygen we mean pure gin, and by hydrogen, gin and water."

—A new "station" has lately been established in a neighboring town on the Troy and Boston railroad, and a worthy son of Erin appointed as an agent, with instruction to hang out the red flag whenever there were passengers awaiting the train. As the cars came through the next morning the engineer saw the flag out, and stopped. The conductor looking out for passengers, and seeing no one but the agent, asked him if there were any passengers to get on, when he answered with an honest "No."

"Then why did you stop the train?" said the conductor.

"Why," exclaimed the agent, "I thought somebody might want to get off!"

That agent was immediately promoted to a professorship on a gravel train.

[For the Illinois Farmer.]

Statistics of an Old Orchard.

Thinking that a few facts bearing upon the age to which apple trees attain in Illinois may be interesting to the horticulturist of this State, I hand you the following statement:

My father, Gershom Flagg, emigrated from Vermont to Illinois and settled twelve miles east of Alton in the year 1818. In the following year, as I find by memoranda in my possession, he set out two apple trees and one hundred peach trees, the kinds and longevity of which I am ignorant of. One or two peach trees probably shoots from the old roots, are still living.

In the year 1822, he procured from the nursery of Mr. Wood, of St. Clair county, three hundred seedling apple trees, costing \$5 per hundred, and set them out in April. Of these about one hundred and twenty are living, but probably not more than sixty are healthy. The largest and most vigorous, at three feet from the ground, measures six feet and nine inches in circumference, or about twenty-seven inches in diameter.

In November, 1822, he purchased of John Smith, residing three miles south of Greenville, in Bond county, two hundred and twelve grafted apple trees for \$20. These varied in age from two to four years old, and with apparently five additional trees made out the following list:

25 Rambo, now living, . . . . .	10
55 Large Romanites, now living, . . . . .	9
18 Hoop's Winter Pearmain, now living, . . . . .	4
29 Rallstone's [Rawle's] Janet, alive but going fast, . . . . .	12
14 Pennsylvania Red Streaks, alive but going fast, . . . . .	9
13 Small Romanites, all dead . . . . .	00
9 Red Russets, [Pryor's Red] living and healthy . . . . .	5
6 Name not known, [Vandeveres] dead fifteen years ago . . . . .	00
8 Red Pippins, dead fifteen years ago . . . . .	00
1 Milam, living, . . . . .	1
2 Blackburn, living . . . . .	2
3 Queen Apples [Large Romanites, under incorrect name], living . . . . .	2
11 Maryland Red Streaks, living . . . . .	1
28 Green Pippins [Green Newtown?] . . . . .	16
25 June Apple [White June] . . . . .	15
217	86

All of these trees, seedling and grafted, were in fair bearing condition up to the winter of 1855-'6, in which, as I suppose, the severe cold

exceeded anything on record in this vicinity, the thermometer falling to 20° below zero. Thus, for thirty-three years, they were in fair health. Since that time the failure has been rapid, and this year the only trees in good bearing and of thrifty appearance were the Pryor's Red. The same was true of the White June last year. The Newtown Pippin trees are of thrifty appearance, but nearly barren. The Pennsylvania Red Streak is still fruitful, but the trees are on their last legs. The Rawle's Janets are nearly worthless, either as trees or bearers, and the Small Romanites have been dead some years. One Newtown Pippin tree measures five feet and six inches in circumference; a Pryor's Red five feet one inch.

At the end of thirty-nine years from the time of transplanting the Pryor's Red may be said to be the only tree whose promise for the future years is still good, and the White June and Newtown Pippin are, I should judge, the only others that will repay renovation. The survivors of these are, of the Pryor's Red 55 per cent.; of the Green Pippin, 57 per cent.; of the White June, 60 per cent.

It may also be of interest to note the fact that the grafted trees have been equally tenacious of life with the seedlings, although set out in the same year.

The ground upon which the orchard grew is the western slope near the summit of the ridge between two creeks, and a few miles west of the dividing ridge between the waters of the Mississippi and Kaskaskia. The orchard is protected on the north and east by young forest trees and the soil is whitish with hard pan subsoil, the natural growth being the hickories and oaks especially pin oak and post oak.

W. C. FLAGG.

Moro, Madison Co., Ills., Dec., 1861.

—Such facts as the above are of great value to the orchardist, and it is additional proof of our previous statements that apple orchards were shorter lived than generally supposed. From these facts we draw two conclusions, 1st, that trees should be trained with low heads, so as to bring them into early bearing; and 2d, that close planting is a matter of protection as well as economy. Low heads, clean planting and shelter are points to which the attention of the tree planter should be called.

ED.

Why is a miser like seasoned timber? Because he never give.

[From the Chicago Medical Examiner.]

### Milk Sickness---Cicuta its Cause.

MR. EDITOR: I am a stranger to you but your public acts are familiar to me, in consequence of which I have taken the liberty of addressing you on an important subject, and so, through your assistance, bring the matter before the State Agricultural Society.

I desire to call the attention of the Society to the fact that there exists through the Western States, a disease known by the name of "milk sickness." Whole families have, in a few days, been consigned to the grave; and yearly we hear of numbers dying with this disease. The "milk sickness" proceeds from the use of cow's milk, taken into the stomach as food—the milk being poisoned from some cause unknown and mysterious. In my opinion it would not be violating the rules of society to investigate this subject fully, and ascertain, for certain, the cause of the "milk sickness," and how to avoid it. In addition to the hundreds of the human family who sicken or die yearly of this disease, vast number of cattle die, or are infected with the "trembles" so much that it requires a long time for them to recover; and it is a matter of doubt whether they ever become sound and healthful for either beef or milk.

In 1836, I became a resident of the State of Indiana, and lived on a branch of the White Water, in a settlement where the "milk sickness" prevailed; several persons died with it, and many were sick, who recovered; large numbers of cattle also died. I resolved, if possible, to find out the cause of the malady; I questioned all the intelligent settlers, and the physicians, in relation to it, and its cause. The doctor said it was caused by using milk from cows that had eaten some strong narcotic; the farmers had various opinions about the matter; some thought it was caused by the poison vine that adheres to the trees, some the poison oak, and some were sure that it was a poison dew on the grass; but the larger portion believed it was produced by some unknown kind of weed, and others again were certain that it was produced by the cattle drinking water out of springs containing poison, and they were under the impression that the poison proceeded from some mineral substance. I have frequently visited the localities where it was said, if cattle run, they would take the "trembles," and numbers die, and to use the milk from cows that fed there, would produce the "milk sickness." In all these localities, I found springs running over large pieces of wild, uncultivated land, producing swampy and damp ground. On this wet land little else grew but the *cicuta*. The *cicuta* has large fleshy roots, from which the stem is easily detached. The cattle in dry times resort to these springs for drink, and tramp off the roots, which decay, and impart their poisoning substance to the water, the impressions made by the cattle's feet in the wet land, become filled with water, and they drink the water saturated with decomposed *cicuta* roots; death or disease of some kind must inevitably follow. On cultivated grass, or prairie land, the roots of the *cicuta* are imbedded in the

turf, and will not come up by taking hold of the top. The top contains but little poison, and the cattle are seldom injured by feeding on the cultivated land, or in the prairies. In woodland, where it is wet or moist, the *cicuta* is found with its roots slightly covered with rotten leaves and light earth; these are extracted readily, and are eaten with the tops, by the cattle, and this must produce sickness or death. In the woods the *cicuta* seldom seeds, grows tender, and is not rejected by cattle. A farmer in Indiana, said he was sure that the water of certain springs was the cause of the "trembles" in the cattle. He had a large enclosure of deadened timber; in one corner of the enclosure there were two springs; when the cattle drank from these springs, which they resorted when it became dry, "they took the trembles," and some died. On inquiring, I ascertained that there was considerable swamp about these springs, and nothing grew there but the wild parsnip, (the *cicuta* is known by the name of wild parsnip, water hemlock, wolf's bane, etc.,) and that as "thick as the bristles on a dog's back." I intimated to him that it might be the "wild parsnip" that produced the "trembles." "No," he said, "it would kill sheep, but would not hurt the cattle;" he was certain the water, and nothing but the water killed the cattle, because he had fenced up the springs, and kept the cattle from the water, and after that he had lost no more.

I have seen in swampy and wet places large quantities of detached roots of the *cicuta* in every stage of decay, the water colored by the decomposed roots, and this water was drank by the cattle. In all places where I found *cicuta* in this condition, "milk sickness" prevailed. After this, I resided in Ohio, on the east fork of the Little Miami, near where the inhabitants had suffered severely from the "milk sickness;" five in one family had died with it, and a number of cattle had died also. I lived in the neighborhood eleven years. I made examinations of the locality where it was supposed that the cattle obtained the article that produced the disease. When I first visited the country I saw large quantities of the *cicuta* in the damp parts of the woods, and about the woods it grew in vast quantities. The tramping of the cattle killed it to a great extent about the springs, and that which grew in the woods was pulled up and eaten by them. In every year's visit I found the *cicuta* less plenty, and at the end of ten years very little was to be found. In proportion as the *cicuta* disappeared, so did the "milk sickness" and the "trembles" in the cattle.

If you feel disposed to have the foregoing subject investigated by the Illinois Agricultural Society, I should be pleased to hear from you as soon as convenient. GEORGE FISHER.

— Any light on the above subject is always interesting to the Western reader. We know not how much of truth there may be in the above, but it is at least worthy of the attention of farmers residing in the infected districts. Will some of our readers enlighten us in the premises?

Ed.

## Madder.

**SOIL AND PREPARATION.**—The soil should be a deep, rich, sandy loam, free from weeds, roots, stones, &c., and containing a good portion of vegetable earth. Alluvial bottom land is the most suitable; but it must not be wet. If old upland is used, it should receive a heavy coating of vegetable earth, (from decayed wood and leaves.) The land should be plowed very deep in the fall, and early in the spring apply about one hundred loads of well rotted manure to the acres, spread evenly, and plowed in deeply, then harrow until quite fine and free from lumps. Next, plow the land into beds four feet wide, leaving alleys between, three feet wide, then harrow the beds with a fine light harrow, or rake them by hand so as to leave them smooth, and even with the alleys; they are then ready for planting.

**PREPARING SETS AND PLANTING.**—Madder sets, or seed roots, are best selected when the crop is dug in the fall. The horizontal uppermost roots (with eyes) are the kind to be used; these should be separated from the bottom roots, and buried in sand, in a cellar or pit. If not done in the fall, the sets may be dug early in the spring, before they begin to sprout. They should be cut or broken into pieces, containing from two to five eyes each; *i. e.*, three or four inches long. The time for planting is as early in spring as the ground can be got in good order, and severe frosts are over, which, in this climate, is usually about the middle of April. With the beds prepared as directed, stretch a line lengthwise the bed, and with the corner of a hoe, make a drill two inches deep along each edge and down the middle, so as to give three rows to each bed, about two feet apart. Into these drills drop the sets ten inches apart, covering them two inches deep. Eight or ten bushels of sets are requisite for an acre.

**AFTER CULTURE.**—As soon as the madder plants can be seen, the ground should be carefully hoed, so as to destroy the weeds and not injure the plant; and the hoeing and weeding must be repeated as often as weeds make their appearance. If any of the sets have failed to grow, the vacancies should be filled by taking up parts of the strongest roots and transplanting them; this is best done in June. As soon as the madder plants are ten or twelve inches high, the tops are to be bent down upon the surface of the ground, and all except the tip end, covered with earth shoveled from the middle of the alleys. Bend the shoots outward and inward, in every direction, so as in time to fill all the vacant space on the beds, and about one foot on each side. After the first time covering, repeat the weeding when necessary, and run a single horse plow through the alleys several times to keep the earth clean and mellow. As soon as the plants again become ten or twelve inches high, bend down and cover them up as before, repeating the operation as often as necessary, which is commonly three times the first season. The last time may be as late as September, or later if no frosts oc-

cur. By covering the tops in this manner, they change to roots, and the design is to fill the ground as full of roots as possible. When the vacant spaces are all full, there will be little chance for weeds to grow; but all that appear must be pulled out.

**THE SECOND YEAR.**—Keep the beds free from weeds; plow the alleys and cover the tops, as before directed, two or three times during the season. The alleys will now form deep and narrow ditches, and if it is difficult to obtain good earth for covering the tops, the operation may be omitted after the second time this season. Care should be taken, when covering the tops, to keep the edges of the beds as high as the middle; otherwise the water from the heavy showers will run off, and the crop suffer from drouth.

**THE THIRD YEAR.**—Very little labor or attention is required. The plants will now cover the whole ground. If any weeds are seen, they must be pulled out; otherwise their roots will cause trouble when harvesting the madder. The crop is sometimes dug the third year; and if the soil and cultivation have been good, and the seasons warm and favorable, the madder will be of good quality; but generally, it is much better in quality, and more in quantity, when left until the fourth year.

**DIGGING AND HARVESTING.**—This should be done between the 20th of August and the 20th of September. Take a sharp shovel or shovels, and cut off and remove the tops within half an inch of the surface of the earth; then take a plow of the largest size, with a sharp coulter and a double team, and plow a furrow outward, beam deep, around the edge of the bed; stir the earth with forks, and carefully pick out all the roots, removing the earth from the bottom of the furrow; then plow another furrow beam deep, as before, and pick over and remove the earth in the same manner; thus proceeding until the whole is completed.

**WASHING AND DRYING.**—As soon as possible after digging, take the roots to some running stream to be washed. If there is no running stream convenient, it can be done at a pump. Take large, round sieves, two and a half or three feet in diameter, with the wire about as fine as wheat sieves, or, if these cannot be had, get from a hardware store sufficient screen-wire of the right fineness, and make frames or boxes about two and a half feet long and the width of the wire, on the bottom of which nail the wire. In these sieves or boxes, put half a bushel of roots at a time and stir them about in the water, pulling the bunches apart so as to wash them clean; then, having a platform at hand, lay them on it to dry. (To make the platform, take two or three common boards, so as to be about four feet in width, and nail cleats across the under side.) On these spread the roots about two inches thick for drying in the sun. Carry the platforms to a convenient place, not far from the house, and place them side by side, in rows east and west, and with their ends north and south, leaving



room to walk between the rows. Elevate the south ends of the platforms about eighteen inches, and the north end about six inches from the ground, putting poles or sticks to support them—this will greatly facilitate drying. After the second or third day drying, the madder must be protected from the dews at night, and from rain, placing the platforms one upon another to a convenient height, and covering the uppermost one with boards. Spread them out again in the morning, or as soon as the danger is over. Five or six days of ordinary fine weather will dry the madder sufficiently, when it may be put away till it is convenient to kiln-dry and grind it.

**KILN-DRYING.**—The size and mode of constructing the kiln may be varied to suit circumstances. The following is a very cheap plan, and sufficient to dry one ton of roots at a time. Place four strong posts in the ground, twelve feet apart one way and eighteen the other; the front two four feet high, and the other eighteen; put girts across the bottom middle and top; and nail boards perpendicularly on the outside as for a common barn. The boards must be well seasoned, and all cracks or holes should be plastered or otherwise stopped up. Make a shed roof of common boards. In the inside put upright standards about five feet apart, with cross pieces, to support the scaffolding. The first cross pieces to be four feet from the floor; the next two feet higher, and so on to the top. On these cross pieces, lay small poles about six feet long and two inches thick, four or five inches apart. On these scaffolds the madder is to be spread nine inches thick. A floor is laid at the bottom to keep all dry and clean. When the kiln is filled, take six or eight small kettles or hand furnaces, and place them four or five feet apart on the floor, (first securing it from fire with bricks or stones), and make fires in them with charcoal, being careful not to scorch the madder over them. A person must be in constant attendance to watch and replenish the fires. The heat will ascend through the whole, and in ten or twelve hours it will all be sufficiently dried, which is known by its becoming brittle like pipe stems.

**BREAKING AND GRINDING.**—Immediately after being dried, the madder must be taken to the barn and threshed with flails, or broken by machinery, (a mill might easily be constructed for this purpose), so that it will feed in a common grist mill. If it is not broken and ground immediately, it will gather dampness so as to prevent its grinding freely. Any common grist-mill can grind madder properly. When ground finely it is fit for use, and may be packed in barrels like flour for market.

—The above we find in the *Rural New Yorker*, credited to the pen of Mr. M. B. Batehan, of Ohio. In our deep, rich soils there is no reason why madder should not prove a valuable farm product. It will be seen that to grow madder will require capital, skill and energy, and with these success must be certain, especially in all


that part of the State lying north of Mattoon, Springfield, Peoria and Galesburg. On the light colored soils south of those points we should not be over sanguine, from the fact that they are not so well adapted to the tuberous rooted plants as the clay loams to the north. Of course sandy and gravelly soils will be avoided, and all heavy clay soils not thoroughly drained.

The water power of the Mississippi at Moline, of the Rock and Fox rivers, must at no distant day be used for turning thousands of spindles, when madder will be needed to color the goods made. In the meantime, it would be well for some of our more enterprising farmers to get their hand in, so far, at least as to get up a good stock of plants for seed, and to become familiar with its culture.

Ed.

**A NEW INVENTION.**—We have been shown a very ingenious and practical invention, for wringing clothes, or rather a substitute for wringing. It consists of two iron cylinders, perhaps two inches in diameter; covered with gutta percha, attached in a horizontal position to a tub, and made to turn by a crank. The clothes, after being washed, are passed between those cylinders by turning a crank, completely and effectually pressing the water out of the garments. So nicely does it do this that scarcely a drop of water is left, and not a thread is broken or in the least strained in the operation. It strikes us as being a valuable labor-saving apparatus, and destined to create a sensation among the housekeepers. Persons desiring further information in reference to it, are referred to Mr. Jas. Frisbie, who will be found at the American House. Those wishing to negotiate for county or State rights will do well to call on him.

**THE SOUTHERN EMBLEMATIC BIRD.**—In one of the Southern cities a party of the leaders of the great rebellion were seated in a cosy room of one of the large hotels, having a merry time over their campaign, when the question arose as to what bird or animal should be adopted as their National emblem. Suggestions from each one had been discussed and all rejected, when one of the number called to his aid one of the waiters. Old Zeb scratched his wool a minute, when his eyes began to brighten, and he said: "Massa, guess de *Gull* will be de emblematicist when dis fuss be ober!"

 We are never satisfied that a lady understands a kiss, unless we have it from her own lips.

### The Neglect of Fruit Trees.

In traveling about the country this summer, we have been painfully impressed with the fact that the majority of farmers sadly neglect their fruit orchards. Where one orchard is properly managed, ten are shamefully neglected. Bad culture is the rule; good culture the exception. "Bad culture," did we say? No culture would be nearer the truth. Look at that orchard of young trees set out six or seven years since. There is not a thrifty, healthy looking tree among them! Many are dead, some are dying, and all are sickly and unproductive. It is a sad sight. "Were the trees unhealthy when set out, or are they poor varieties, or is the climate too severe?" Not at all. Other orchards in the neighborhood are healthy, productive, and a source of profit to their owners. It is a bad management; the entire absence of good culture. The trees were stuck out in small holes dug in a wheat field, and left to live or die, as it might chance. Since then the field has been in grass or grain; the orchard has received less culture than almost any other part of the farm, from the idea probably that the trees would take care of themselves. This man is a subscriber to the *Genesee Farmer*, but we are ashamed of him. We hope none of his neighbors see him take the paper out of the post office. Can't we persuade you, Friend Fruitless to do something with that orchard? We should prefer to see it cut up, root and branch; but if this is asking too much, do cut out all the dead and dying limbs; put the plough into the soil this fall and give it a good summer-fallowing next season. You have a little manure to spare—we may be mistaken on this point, inasmuch as the dark pools in the barn yard indicate that it is not very carefully—but if you could spare a little, it would do the trees no harm. Suppose you try a little? At all events, do something for that orchard. Your corn looks well. It has been properly cultivated. You plowed the land well and deep, and the horse hoe has been freely used, keeping the soil clean and mellow. The crop will be good and does you credit. You cultivated your potatoes well; the land is very clean and you have a good crop. You put in your wheat last fall on a good summer-fallow. You provided what Tull calls a good "pasture" for the roots to feed in, and your heart gladdened as the crop grew and flourished, and produced a bountiful harvest.

Can you not take a hint from these results? Cultivate your trees half as well as you cultivate your corn, and your orchard would be a credit to you.

Fruit trees are set out by millions every year. The nurserymen of this city alone send out each year a million dollars' worth of fruit trees and other nursery stock. As a rule, the trees sent out are healthy and good; and yet how small a proportion ever live to bear fruit, or make profitable orchards! The principal cause of this is the want of previous preparation of the ground. Farmers will take pains to prepare their land for wheat and other grain crops; but fruit trees, intended for a permanent orchard, and involving considerable expense in their purchase, are set

out, with little thought or care, on land which has received no adequate preparation. Subsequent culture may do something towards correcting this first grand mistake; but it requires far less labor to prepare the land right in the first place than to do so after the trees are set out.

Let all our readers, then, who intend to set out fruit trees this fall, get the ground ready now. Not a day should be lost. If the site intended for the orchard is not entirely free from stagnant water, it must be underdrained. To determine this, dig a hole three feet deep, and if water remains in it, it needs draining. If fall can be got let the drains be cut four feet deep. Then plow the land deep and well, and if subsoiled all the better. This cultivation of the whole surface will be better than digging even the largest holes, and will save much time in planting.

If the soil is not rich enough, it is better to manure now than to apply the manure in the hole at the time of planting. This, in fact, should never be done.

For the first few years after the trees are planted cultivate nothing but hoed crops. The use of the plough and cultivator will keep the soil mellow and moist. The difference in the appearance of trees growing on land that is cultivated during the summer, and on that which is in grass or grain, is most striking—especially in the case of peaches.

It requires no particular skill to raise our ordinary fruits. Every farmer might have them in abundance; but he who hopes to be successful must abandon the idea that fruit trees will flourish in grass or grain.—*Genesee Farmer*.

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THE CONSTITUTIONAL CONVENTION. — The Springfield correspondent of the *St. Louis Republican*, in giving the law under which the Constitutional Convention is called, says:

By this act the Constitution framed will have to be submitted to the people, and will be of no force until ratified by the people. It has been said by some that the Convention will have power to adopt a Constitution without submitting it to the people, if it shall so choose. Without saying anything in regard to the bad policy of such a proceeding, we do not believe that the Convention will possess any such power. At all events, there is no probability that such an exercise of power will be attempted. The talented number of delegates who will have a seat in the Convention, is a sufficient guaranty that the interests of the people will be well attended to.

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—"Why don't you wheel that barrow of coals, Ned?" said a miner to one of his sons; "it is not a very hard job. There is an inclined plane to relieve you."

"Ah," replied Ned, "the plane may be inclined, but hang me if I am."

### The Real Sovereign States.

The six Middle States of this Confederacy are obviously destined to control the country. They confirm the deductions of many philosophical historians, who say that mankind instinctively seeks the regions where climatic conditions combine with a fertile soil to make agriculture the most profitable. The census of 1860 demonstrates that the white population is tending toward the Middle States. Pennsylvania, Ohio, Indiana, Illinois, Missouri and Iowa, not to mention parts of New York and Virginia, now contain more than one-third of the white population of the thirty-nine States and Territories. These six States number ten million one hundred and three thousand five hundred and seventy-three souls. Forty-one per cent. of the entire increase of the country in the last ten years was made within their limits. While the six New England States, which set out in 1850 with 2,728,116 have only increased 400,526, or fourteen and a half per cent., the Middle States have run up from 5,918,985 in 1850, to 10,103,573 persons in 1860.

Certain scientific men have predicted that the best of land extending from the Atlantic to the Missouri river, between the 38th and 42d parallels, would eventually be the garden of this continent. Its climate, removed alike from the rigors of the winter in the more northern States, and the oppressive heat of summer in the more southern, has proved to be the most healthful and the best adapted to our principal agricultural staples. West of the Mississippi river, on these parallels, is Kansas and Nebraska, which are fertile in parts, but too near the great desert of perpetual drought. The quantity of rain averages there less than one-third of the annual fall in the State east of the Mississippi; hence the crops are precarious and scanty; and Iowa seems to be the western boundary of the most desirable agricultural land of the continent.

Illinois, the last settled of the States east of the Mississippi, leads them all in the wonderful progress of the last decade. She has gained 839,768 in population, and the prairie lands have quadrupled in value. By the opening of railway greater wealth of agricultural product has been developed there than in any other State. These facts have a bearing, also, upon the political condition of the nation, and particularly upon its condition in the future, which wise statesmen have not, or at least ought not, to overlook.—*N. Y. Post.*

**STOCKINGS FOR THE ARMY.**—The Seneca Falls *Reveille* states that the Seneca Knitting Mills, now engaged on government contracts, employ between three and four thousand men and women, and yet this force is inadequate to meet the demand. Orders for many thousand pairs of stockings have been turned away, and have gone elsewhere. The company have ordered a large amount of new machinery, sufficient to increase the capacity of the mills at least one-third.

### Bleeding Cattle in Spring.

Mr. John Johnson has favored the *Rural New Yorker* with the following correspondence for publication. It will be read with interest by many of our readers.

The following is a copy of a letter received by Mr. Johnson, some four weeks ago, from a stranger:

SIR:—I would like your opinion in regard to the common practice in many portions of the country, of cutting or slitting the tails of cattle. Do you consider it beneficial, injurious or useless, and, if either, will you be kind enough to give me your reasons? Do you ever practice it? If so, at any special period of the year, and your method of doing it? Would you advise me to do it at this time of the year, if you approve of it at all? I have forty three year old steers in fine condition, and not fancying the practice, did not operate on them in the spring; but have been urgently advised to do so by several friends. If demands on your time and patience are not too great, I should be very of your opinion, which will much oblige,

Yours, &c.,

The following is the answer to the foregoing:

DEAR SIR:—I have received yours of the 20th inst. respecting the tails of cattle. Bleeding cattle in spring, either by neck, vein or by cutting their tails, has been practiced by many stock keepers ever since I remember anything, and that is over sixty years. I have owned and kept cattle all of fifty years, but never have made a practice of bleeding any animal unless it was sick, as I consider the wholesale bleeding of cattle in spring useless and barbarous. What would you think of a man who would call in his family physician every spring and have his whole family bled? Yet that would be no more absurd than the indiscriminate bleeding of his cattle every spring. If men would always do by their domestic animals as they would wish to be done by, if they were in their place, with regard to feeding during the winter and spring, they would not think they required bleeding in spring in order to make them thrive. The practice must have originated in the dark ages and has nearly become extinct, as not one in twenty, or I might say fifty, bleeds his cattle now unless sick, while forty years ago, a vast majority did. I think they must also have given up that practice in both England and Scotland, as I hear nothing of it from the last importations from my native country.

Yours respectfully,

JOHN JOHNSON.

—Boys if you don't want to fall in love, keep away from muslin. You can no more play with those girls without losing your hearts, than you can play with gamblers without losing your money. The heart-strings of a woman, like the tendrils of a vine, are always reaching out for something to cling to. The consequence is, that before you are going you are "gone," like a lot at an auction.



### Flax Cotton.

By flax cotton is meant the fibre of flax reduced in length, cleansed, carded, bleached, and nicely prepared to resemble in appearance cotton that has been cleansed and carded, and adapted for mixture with cotton or wool in the various fabrics of daily wear and use.

To accomplish this requires improvement in the mode of breaking the straw and separating the fibre from the wood, and of the carding, drawing and spinning frames which are in common use, as well as great nicety in bleaching. All these are to be made by ingenious machineists and manufacturers, and require the expenditure of time and money and careful experiments.

The American Flax Cotton Company organized at Boston in 1859, under a special charter from the State of Massachusetts, adopted the patents of Stephen Randall, of Rhode Island, Jonathan Knowles and J. M. Allen. Experimental mills were established at Watertown and at Roxbury, and thousands of dollars expended in improving the machinery and perfecting their processes. Many pieces of print goods, flannels, satinet, crash, etc., have been made from the material prepared by them, and all been fully approved. The only question now made is as to the cost of it.

The principal persons interested in this company are men of business experience, reputation and intelligence, whose figures and statements may be relied upon. Samuel Nicholson, Esq., the patentee of the excellent pavement on Clark street, and widely known as a gentleman of reliability and integrity, stated last winter, at a meeting held in the legislative hall at the State house in Boston, that for several months he had daily charge of the works at Watertown, and from his own careful estimates and weights, the material called flax cotton could be supplied by their processes at from seven to nine cents per pound—the cost dependent upon the quality of the raw fibre and its distance from the mills. It was further stated that Messrs. Sampson and Tappan, of Boston, had now in operation a mill with forty looms, and were satisfied with the results therein attained.

The meeting recently held at Lockport N. Y., appears to be a movement of the capitalists who own the hydraulics and real estate at that place, in conjunction with speculators interested in a steam gun, which is said to explode the straw into atoms, and thus separates its fibre. We have not heard that any results have as yet been accomplished by that method.

The way to prepare flax for use in our ordinary manufacturers at a cost that will render it desirable, is one of the most important questions of the age. We can see that millions of money can be saved and added to the agricultural resources of our Northern States when this question shall be solved satisfactorily.—*Chicago Tribune.*

COMPLIMENTARY.—Price's quotations from "Marco Bozzaris" while Halleck is commanding in Missouri.

### To Keep Fowls Free from Vermin.

There are several kinds that infest the hen. By attending to the following remedy, they will be entirely kept clear. First of all, if in confinement, in the dust corner of the poultry house mix about half a pound of black sulphur among the sand and lime that they dust in. This will both keep them free from parasites, and give the feathers a glossy appearance. If infested with the insects, damp the skin under the feathers with a little water, then sprinkle a little black sulphur on the skin. Let the bird be covered with the insects, they will disappear in the course of twelve hours. Also, previous to setting a hen, if the nest be slightly sprinkled with sulphur, there is no fear of the hen being annoyed during incubation, neither will the chickens be annoyed by them. Many a fine hatched brood pines away and dies through nothing else, and no one knows the cause. Having had an ostrich under my care that was pining, I looked into his feathers and observed thousands of parasites. I employed tobacco water and lime water, under my then master's orders, to no effect. In his absence I well damped him, and sprinkled him under the feathers with black sulphur, when next day they were examined by a microscope, and every one was dead. Having had some macaw, also parrots that were addicted to biting off their feathers, I employed the black sulphur by well syringing them with water, then sprinkling the sulphur over their skins. If tame, sponge the skins, then rub gently with the points of the fingers, with the sulphur, every other day for about a fortnight, when the parrot or macaw will cease to destroy his plumage. It is not a remedy which has not been proved, for I have used it these two years with success.—*Cor. London Field.*

DRYING RHUBARB.—Rhubarb dries very well and when well prepared, will keep good for an indefinite period. The stalks should be broken off while they are crisp and tender, and cut into pieces about two inches long. These pieces should then be strung on a thin twine, and hung up to dry. Rhubarb shrinks very much when drying—more so than any plant I am acquainted with, and then resembles pieces of soft wood. When wanted for use, it should be soaked in water over night, and the next day simmered over a slow fire. None of its properties appear to be lost in drying, and it is equally as good in winter as any dried fruit. Very few varieties of rhubarb are suitable for drying, as most of them contain too much woody fibre. The best kind for any purpose is the Victoria, when grown in a suitable situation. The Mammoth is worthless, owing to its fibrous nature, as are also some other kinds.

—"I was showing dear little Charlie the picture of the martyrs thrown to the lions," said Mrs. Jenkins, "and was talking very solemnly to him, trying to make him feel what a terrible fate it was." "Ma!" said he, all at once; "oh, ma! just look at that poor little lion away behind there—he won't get any!"

## Annual Meeting of the Illinois State Horticultural Society.

This meeting commenced at Bryan Hall in the city of Chicago, December 3, and continued four days. There were seventy members present, a more than usual large number. The most marked feature of the meeting was the absence of nurserymen, and their places filled with fruit growers and gardeners. The society from which this Society originated was mainly composed of nurserymen, in fact it was controlled almost entirely by nurserymen, and their proceedings, though valuable to that class, gave little aid to the orchardist and the gardener, and we are now happy to announce that the Society is no longer a misnomer—a nurserymen's convention, but actually what it purports to be, a Horticultural Society. It is true that the exhibition was mainly confined to fruits, but hereafter the broad field of gardening, orcharding, fruit growing, and flowers are to have their respective positions, and combine for a grand display. The time for holding the annual meeting is so changed as to be available for the accomplishment of this object.

Most of the subjects discussed related to fruits and fruit growing. The apple, pear and grape occupying a large share of attention.

We do not intend to give a detailed statement of proceedings, but the most valuable results arrived at, to cull from our ample notes points of most interest to our readers.

In the list of names that we give below, it will be seen that several of our most prominent nurserymen were present, but the most of these men are now among the largest fruit growers of the State, and several of them are going out of the nursery business, in fact less than a fourth of the number were nurserymen:

### LIST OF MEMBERS PRESENT.

O. B. Galusha, Lisbon; Dr John A. Kennicott, The Grove; Edgar Sanders, C. D. Bragdon, C. T. Chase, J. H. McChesney, T. F. Baldwin, H. M. Thompson, J. C. Ure, D. C. Bonnard, J. Asa Kennicott, P. W. Gates, F. Sulzer, H. D. Emery, W. W. Corbett, T. Kearnon, and A. J. Higgins, from Chicago; C. R. Overman, W. H. Mann, K. H. Fell, R. H. Holder, and F. K. Phoenix, from Bloomington; J. E. Starr, Alton; Chas. Merritt and Dr. Haskell, from Battle Creek, Michigan; G. W. Minier, Mackinaw, Ills.; J. Huggins, Woodburn; A. R. Whitney and W. H. Hauson, from Franklin Grove; W. D. Robinson, Henry; J. F. Nash, Ottawa; W. C. Flagg, Moro, Ills.; James Crow, Crystal Lake; Robert Douglass, and Dr. W. C. Baker Waukegan; A. Bryant, jr., Princeton; S. G. Minkler, Specie Grove; J. S.

Sherman, H. P. Kimball, and Dr. C. N. Andrews, from Rockford; E. P. Snow, Oregon; J. Periam, Hope; P. W. Alexander, J. T. Little, and J. T. Brubacker, of Dixon, Ills.; E. Baldwin, Farm Ridge; Samuel Edwards, LaMoille; J. O. Dent, Wenona; D. W. Cropsey, Plainfield; J. Y. Corey, Waukegan; E. B. Warner, Morrison; J. B. Phinney and M. L. Dunlap, Champaign; James Wake-man, Cottage Hill; F. H. Benson, Havelock; D. S. Boger, Freeport; H. N. Bliss, Buda; L. Ellsworth, Naperville; J. P. Reynolds, Springfield; J. Ozanne, jr., and Dr. P. R. Hoy, Racine, Wis.; B. H. Streeter, Morris; H. M. Kidder, Evanston; O. S. Willey, and L. P. Chandler, Madison, Wis.; A. G. Hanford, Columbus, Ohio; Hans Cracker, and J. A. Lapham, Milwaukee, Wis.; Verry Aldrich, Tiskilwa; Wm. W. Johnson, Chicago.

Mr. C. D. BRAGDON, President of the Chicago Gardner's Society, delivered the opening address of welcome, and which was followed by President Kennicott. We have not the space for them, and must be content with a few words from each. Mr. Bragdon's allusion to the insect tribes is a truthful one, and was subsequently pretty well illustrated by Dr. Hoy, of Racine. He said:

"We have enemies, open and secret enemies. They prey upon us, destroy our substance, neutralize our labor, dishearten and disarm us. Why? Because we do not know them—do not know the truths which illuminate the laws that govern them—which disclose to us the guise in which they come to torment us, and the character of their weapons.

"How shall we meet them, and what must be the order of battle, what the mode of attack? and what will be the result of a victory on either side? It is plain, if we study our own interests, that the causes which contribute to our adversity must be sought out and removed. The incidental growth of weeds and hedgerows in the way of our progress must be hewn down down and uprooted. We have friends, open and secret friends, known and unknown, appreciated and unappreciated—friends that labor for us, promote our interests, minister to our comfort, and aid in the supply of our wants. They often come in disguise, and we too often repel them. They are a good providence to us. They prey upon our enemies, and surround and defend us from them. They linger about the homestead, and in the orchard, garden, and field, they labor for us. They are active ministers to our comfort—faithful and true agents. It is important we should know them. It is imperative that we learn to distinguish our friends from our enemies. The search for truth involves the acquisition of this knowledge. And I do not underestimate any man's knowledge when I aver that only the a, b, c, of the truths that affect our life and prosperity, as a producing people, have been learned."

The old veteran in the ranks of Flora and Pomona, the venerable President of the Society, Dr. Kennicott, was exceeding happy in his re-

marks, though rather caustic on the members of the Legislature, who promised, but did nothing for the Society. We can give but a few paragraphs :

"And, as this may be my last lecture, I know you will listen patiently—to gather the meaning of what I shall say. Though nominally my inaugural, I intend it for a parting legacy, to all the brotherhood of productive LABOR.

"No one will consider this presumption in a President of the State Horticultural Society—one who has practiced horticulture for half a century, and has had the honor—as a delegate of Illinois—to succeed THE "FATHER OF AMERICAN RURAL SCIENCE"—in the chair of the first "North American Pomological Convention; and once before now, presided over the largest meeting of Pomologists the West ever saw—in this very city of Chicago."

\* \* \* \* \*

"Being prevented by illness from attending the last winter session of our State Legislature, I employed an agent, without pay, and wrote, or caused to be written, numerous letters to such Senators and Representatives as I happened to know or whose antecedents and "professions" of regard for public interests, seemed to point out, as the proper men to advocate our modest demands on the State Treasury. And we asked, first, a "special charter," like that of our State Agricultural Society. And last, an appropriation of \$500 to \$1,000 to, enable us to gather materials *at this meeting*, and print and distribute, free, a reliable guide, for the farmer and lot holder, in all its branches of Northwestern Horticulture. Much needed practical information, to be found in *no one book*, in existence." \* \*

\* \* "But the 'servants of the people' had too much to do for themselves, to think about so small a matter as Horticultural improvement! *Wild cutting*, and city chartering, and other such "statesman-like" objects, were of far greater account, and more likely to pay (for legislation) in "dollars" down, and *more dollars* hereafter.

"So, you see, all I could get for you, was this unauthorized draft on the good will of a kindred association. Something like a gratuity, out of another man's pocket—but more like an offer of pardon to a culprit—*after* he had been "hanged by the neck till dead!"

"You can well imagine that *this* 'took all the conceit out of' your confident president—though it did not in the least diminish his confidence in either the 'honesty or liberality' of politicians—whether 'Republicans' or 'Democrat.' Though, contrasted with the modicum of true manhood, and straightforward 'honest' rascality, always evinced by many of the old 'close fist' "democracy." I did think, that, perhaps, the people of Illinois, (and also of the United States) might have done well to remember the fable—of the fox and swallow—touching a certain 'swarm of flies.'

"Well, gentleman, as a society, we are no worse off than before, and we can put our hands into our own pockets to print our own proceedings, and give the book away just as easy as heretofore. \* \* \*

And now, for my parting advice to you, and the whole brotherhood of rural and mechanical labor. Since the first politician beguiled the first "gardener" the cunning tongues of his progeny, and the strong wiles of despots, have ever been too powerful for the sons of honest labor—"the bone and sinew," as we are conventionally termed—*just before every election*. For, when the lion's skin has proved too short, it has always been eked out with the fox's hide. And we who saw the cheat have still submitted, for sake of peace and quiet, and because we knew that, of every twenty farmers, nineteen *would* be humbugged, say what we might.

"It has been said that 'the pen is mightier than the sword.' I question not the adage, but mightier than every other instrument is the *tongue*, in this free country. Words, deftly spoken, whether true or false, are the engines that move the masses. We are but animated puppets—our votes are bought and sold in the political market—with advantage to both buyer and seller; ; but *we* get only *words* in payment." \* \* \* "In the meantime, let our peaceful pursuits go on. The beautiful which we create will be "a joy forever," whether we live long to enjoy it or soon leave the growing legacy to our children, and generations to follow them. Our natural mission is one of unmixed beneficence. By the help of the law of nature, and the rules of rural taste, we are painting living landscapes, and dotting the bald prairie with perennial verdure—strewing here and there, as we go, such timely supplies of the cooling and luscious products of *moder pomology*, as the earlier worshippers of the fruity goddess never dreamed of in Eden! And soon—very soon—we may hope to present the thin blooded invalid and slow pulsed patriarch with such a "cup" as might have raised Bacchus above Jupiter, and will do more for temperance and jollity than all the sermons on the sin of drunkenness, and all the impossible provisions of human law ever uttered or enacted on this side of time.

"And now, let's all to the practical work before us. My last "inangural" and anticipated "valedictory" are ended together."

The fruit day was mainly spent in preliminaries, the addresses above and the reading of letters. In the evening, the small fruits came in for a share of the talk.

The second day the active duties of the meeting were more apparent.

#### AMATEUR LIST OF WINTER APPLES

Was the first taken up. Westfield Seek-no-further was the first in order. Mr. Willey, of Wisconsin, spoke highly of it for his State, and was followed by one or two others, but the larger number considered it a poor bearer—passed. White Winter Pearmain was considered too tender for Northern Illinois. Herfordshire Pearmain fruit was first rate when you get it. English Golden Russet—various opinions of its value—passed.

## ADDITIONS TO THE LIST.

Flushing, Spitzenburgh; tree hardy, a good fruit, with fair crops, tree spreading, with wavy branches. Stannard, Dunlap, Dr. Kennicott, and others, spoke highly of this fruit, considering it one of, if not the most profitable winter apple for the north part of the State and Wisconsin. This fruit must at no distant day take a high stand among our standard winter apples. The tree is a vigorous grower, bears young, fruit large, good for both the table and cooking. Waggoner, pronounced by several too tender. Mintler, a valuable apple. Dunlap suggested that it might prove identical with Brandywine and Ellsworth, that of Ben Davis apple; it is doubtless some old kind, and was named Minkler some years since by the Northwestern Fruit Growers' Society. It was added to the list for general cultivation. Ramsdell's Sweet was added as a valuable sweet apple. It is a very productive and early bearer.

## FOR GENERAL CULTIVATION IN CENTRAL ILLINOIS.

White June, sometimes known as Kirkbridge White, was added to the list. It should be grown in limited quantities, unless handy to market—its season is short, and bruises badly in carriage, and soon becomes unsaleable. Fall Wine—changed to amateur list; season too short to plant largely. Rambo, added to list; should be top grafted; is tender, but with all its drawbacks, is a valuable and profitable fruit, and not easily dispensed with. Fameuse is to be hereafter called Snow Apple, which is the English of Pomme de Nieve. Trenton Early, or English Codlin, added to the list, is valuable for cooking, bears early and large crops. Hubbardson's Nonesuch, after considerable discussion, was added to the amateur list. Fulton, considered one of the most valuable, and is an Illinois seedling, grown by Mr. Elijah Capps, of Fulton county, an abundant bearer, tree hardy, with a beautiful symmetrical head. White Bellflower, stricken from the general list, and placed on the amateur list. Yellow Bellflower disposed of in the same way. Limber Twig, stricken out of the list to give place to that of the Willow Twig.

Adjourned to partake of a lunch with T. B. Bryan.

## AFTERNOON SESSION.

Esopus Spitzenburgh was stricken from the list as one of no value for prairie orchards.

A motion to strike Downing's Paragon, an Illinois seedling, from the list, was lost. Red Canada was highly commended by our Michigan friends.

## TRANSACTIONS OF THE STATE AGRICULTURAL SOCIETY.

One hundred copies of the Transactions were presented to the Society by John P. Reynolds, Esq., Corresponding Secretary, for which the thanks of the Society were tendered. This valuable work will be distributed gratuitously to the members.

## A GRAND EXHIBITION.

Mr. Starr, of Alton, offered the following resolution;

*Resolved*, That it is best for the interest of the Society, that it hold an annual exhibition, and that the first one shall be held in the city of Chicago in September or October next, as may be decided best by the Executive Committee, so as not to conflict with the State Fair.

Messrs. Starr, Minier, Overman, Dr. Kennicott, Ellsworth, Bragdon, Dunlap, Kidder and Galusha spoke warmly in favor of the measure. This is not intended to interfere with the horticultural department of the State Fair as now arranged, but to hold an exhibition of horticultural products, including vegetables, fruit and flowers, and for which a liberal list of premiums will be offered. It was contended that Chicago, being the great central point for the distribution of fruits, it is the proper place to hold such an exhibition.

Mr. Starr stated that the railroad books at Alton presented the fact that 40,000 barrels of apples, 800 barrels of pears, 10,000 bushels of peaches, 300 bushels of quinces, 500 bushels of plums, 200 boxes of grapes have been shipped from that point the present season. Our Michigan and Wisconsin friends were much pleased with the proposition, and promised to take an active part. At this commercial metropolis, not only of Illinois, but of Michigan and Wisconsin, it was proper that all local or sectional influences should be thrown aside, and that the gardeners, the fruit growers and florists of the Northwest should join hands and hold an exhibition that should be a credit to the Northwest. The exhibition is not only for a show of horticultural products, but it is intended at the same time to continue those discussions which have given so much interest to the annual meetings. There is no doubt that the exhibition will be one of the most successful of the kind ever held in the United States. The West has the means and the ability for this, and it will be done.

## MAY CHERRY.

For the past two or three years this cherry has attracted no little attention. The main question is, is it the Early Richmond of Downing? Dunlap, Edwards and others contended that it was not, or, at best, not the cherry sent out by the Rochester nurserymen as that variety, but as that better known as the Early May of Cincinnati. Ellsworth, Phoenix, Bragdon and Overman contended that it was the same that J. J. Thomas has sent out for the Early Richmond. There is one thing certain, that this is the only cherry of value to the prairie farmer, let it be called what it may. It has been long known in Kentucky, Ohio, Indiana and Illinois as the Early May, and doubtless a sub variety of the Kentish, or Early Richmond.

The subject was disposed of by a resolution to appoint a special committee of three to investigate the identity of these fruits, and to report such other facts in regard to its history that may prove of value.

Adjourned to 7 o'clock H. M.

In the evening, Dr. Hoy, of Racine, delivered a discursive address on the sapsucker, woodpecker, and insects, by injuries to fruit trees.

The Dr. came well prepared with specimens of birds, insects, and sections of wood to illustrate his subject. Among all the birds of this section, there were but two that he held as avowed enemies, and which he treated on all occasions, and these were the Cedar Bird and the small Woodpecker, known of all fruit growers as the Sapsucker. This latter gentleman he held in no good esteem, and would recommend an indiscriminate warfare upon him. This bird should not be confounded with the Nut Hatch, a similar bird, who has the habit of alighting on the trees with his head down; nor should be confounded with two woodpeckers herewith presented, both of which are our good friends. The Sapsucker, both male and female, have red heads, but the male has a more brilliant crown. Some naturalists contend that this bird is an insect-eater, though he may occasionally take up a beetle, his food is the *liber* and *cumbium* bark of trees, and his drink the sap, hence his name, Sapsucker.

#### ITS HABITS.

The Sapsucker is a migratory bird, and arrives in Racine, Wisconsin, about the 15th day of April, not varying more than five days. On his arrival he attacks the sugar maple, pine, spruce and silver poplar; but the sugar maple is the favorite at this time. He also attacks thrifty growing fruit trees. The damage to be guarded against at this time more particularly is to the poplars and maples. At this time they come in flocks, more especially along the lake shore, and the whole army of boys with cross boys, shot guns, stones and clubs, and wage a war of destruction against them; but it is doubtful which does the most damage to the trees—the birds or the boys. About the last of June they return to the deep wood to breed, from which they make daily forays to the orchards and gardens, doing more or less damage. After the breeding season is over, the old birds, with their broods, return to the fields, orchards and gardens of the farmers and others, and go quietly to work to destroy thousands of valuable fruit, shade and ornamental trees. Returning with the new recruits, they attack the apple, the pear and the mountain ash with a vigor that, unless they are killed at the outset, an immense number of valuable trees will be killed or seriously injured. This bird goes at his work of destruction quietly, and with an insolence that is worthy of him. He cannot be driven off like other birds, but to stop his depredation, must be destroyed, and fine shot, that would not penetrate the tree, is the proper material to be used.

While in the deep forest he lives on the iron-wood and lynn, mainly, as these trees furnish sap and an abundance of cambium and liber. Yet they prefer the smooth, thrifty trunks of fruit trees, as is proved by their daily visits to the orchards.

The last of October they leave for the south, and we see nothing more of them until April.

Dr. H. repeated his recommendation to destroy them on every occasion.

The remainder of Dr. Hoy's lecture was very interesting, but our space will not permit of further notice. It is to be printed.

Among the apples on exhibition was the Perry Russet, of Wisconsin, or rather of the Buffalo Nursery, of B. Hodge. This variety has proved one of the most productive and hardy of winter apples cultivated in Wisconsin. Mr. Hanford, Mr. Willy, and others, spoke highly of it. It is the same fruit known in the north part of this State under the name of Winter Russet, Chesbro' Russet, Poughkeepsie Russet, and Golden Russet. We have cultivated and sent it out under the name of Winter Russet, having received it from Mr. Hodge under some half dozen different names, which, we believe, was his practice with all valuable sorts. The tree is hardy with us, a good grower, with a round, symmetrical head, bears good crops alternate years. The fruit is large and fair.

The Bagsby Russet sent to the convention by Mrs. Lieut. J. M. Hunter, of Ashley. The specimens was small on account of the drouth, but were pronounced by several members one of the best quality. It is little known. Mr. H. has called the attention of members to this fruit on one or two occasions. It may prove a new seedling, and valuable to that part of the State.

#### THIRD DAY.

The first business in order was the grape, a subject of deep interest to most of the members, and they entered at once into the merits of the case. The first one proposed to be added to the general list was the

#### DELAWARE.

At Racine it had proved hardy, though like all other grapes, is improved by laying on the ground through the winter, with slight covering, and is only moderately vigorous. The first year the growth is slow, but after that does better. A large number of members participated. The result showed that in some places the growth is slow, and in others good; that some plants, from some unexplained cause, failed to grow, while others in the same soil did well. It was pronounced by several as capricious, but the superior quality of the fruit carried it triumphant, and it was added to the list by a close vote.

#### THE CLINTON

Found many friends for its abundant crop of



early grapes. Dr. Hoy suggested that there was a large number of spurious plants in the market. Others contended that the fruit from the same vine and from vines from the same plant had a wide margin of quality, from biting acid to sugar sweetness.

The Concord and Hartford Prolific were also added to the list for general cultivation. White Sweetwater and Northern Muscadine were added to the amateur list.

The first business in the afternoon was the election of officers, when the following gentlemen were unanimously elected:

PRESIDENT.

C. B. Galusha, of Kendall county,

VICE-PRESIDENTS.

1st district, C. D. Bragdon, of Cook; 2d district, Robert Douglass, of Lake; 3d district, Chas. H. Rosenstiel, of Stephenson; 4th district, J. H. Stewart, of Adams; 5th district, A. Bryant, jr., of Bureau; 6th district, J. F. Nash, of LaSalle; 7th district, M. L. Dunlap, of Champaign; 8th district, J. H. Fell, of McLean; 9th district, N. Overman, of Fulton; 10th district, J. Huggins, of Macoupin; 11th district, Charles Kennicott, of Marion; 12th district, James E. Starr, of Madison; 13th district, G. H. Baker, of Marion.

C. T. Chase, Corresponding Secretary, Cook county; W. C. Flagg, Recording Secretary, Madison; J. T. Little, Assistant Secretary, Lee county; and S. G. Minkler, Treasurer, Kendall county.

For the want of space in this number, we must defer further notice of the transactions to our next. Some very interesting facts on grape culture transpired.

**GOLD AT VANCOUVER.**—The gold fever rages at Vancouver's Island, according to the latest advices sent to England, and a correspondent writes that it is common to meet men who have found sums of from \$5,000 to \$10,000; and lately three men arrived from Fraser River who made \$80,000 between them in six weeks. Another man brought \$30,000, the result of his summer's earnings, and several miners brought smaller sums. The steamer in which these men came down the river brought about \$250,000 in dust. The amount of gold taken out of a single district, named Cariboo, appears really fabulous.

—Men heedless of charity make more beggars than usurers do.

—Women never truly command till they have given their promise to obey.

## Cotton Culture on the Prairies.—Historical Facts and Proofs.

Our recent publications of facts, says the *Chicago Tribune*, connected with the culture of cotton in this State have created much surprise among those to whom the entire subject was new. Many of our old residents looked upon it justly as but the revival of an old topic, a return to a source of agricultural wealth, well established in the past, and only abandoned because made less profitable by competition. All that is needed to prove the practicability of profitable and extensive culture of cotton in this State, is a proper presentation of historical facts. The actual record will outweigh all theory on the subject.

The following statements in relation to cotton growing in Southern Illinois, were furnished to the Illinois Central Railroad Company. An agent of the Company is now collecting information of a similar character further south, and there seems to be conclusive evidence that we eight to ten millions of acres of lands which will afford good merchantable cotton, from 300 to 500 pounds to the acre. During the coming year, if Illinois cannot market her corn crop, she must turn attention to cotton, flax, castor beans, sorghum, and other semi-tropical products.

James L. Lamb, Esq., (Mather, Lamb & Co.) Resident now of Springfield, formerly resided in Randolph county in 1823, 1824 and 1825. Was storekeeper; used to purchase cotton of the farmers, and shipped it from Kaskaskia to Pittsburg by the Ohio; generally 200 to 300 bales during the year. There were several gins worked by horse power in the county.

M. F. Hackett—Lived in Sangamon county from 1829 to 1841; many of my neighbors at that time raised cotton every year; Elihu Bowen's gin worked by horse power; was generally resorted to to gin the cotton. I never heard of any trouble by frost—it was raised as easily as corn. I have often seen it raised for first crop on new prairie sod.

W. Butler, State Treasurer—Came to Illinois in 1824 with his father, who raised cotton annually for several years. Butler used to take the cotton to Bowen's gin, and names a dozen different neighbors who made cotton part of their annual planting until the low price of manufactured goods drove homespun out of the market. Elihu Bowen's gin was located on Rock Creek, sixteen miles west of Springfield.

In Fayette county, twelve miles from Vandalia, a cotton gin was in constant use between 1832 and 1836.

### LIEUT. GOV. CASEY'S LETTER

Z. Casey emigrated to Jefferson county, Illinois, from Middle Tennessee, in the year 1817.

"I had been in the habit of raising all the cotton the family used prior to coming to this State. For twelve years after I came Illinois, to-wit: from 1817 to 1829, we raised cotton every year sufficient for home consumption, and discontinued raising cotton there because cotton goods could be purchased cheaper in the stores than made at home. We used Tennessee cotton seed. Planted usually about the first of May, and picked out during the month of September. Usually we had no trouble from frost.

"I have no doubt but that cotton could be raised to advantage in all the south half of Illinois every year. "Z. CASEY.

"Mt. Vernon, Jefferson Co., Ills., Dec. 9, 1861."

Samuel Henry, aged 67 year, came from Tennessee in 1819—post office, Nashville, Washington county; for six years raised cotton near Sparta, Randolph county, and three subsequent years raised it where he now lives. Gave up the culture because it imposed too much labor upon the women, and cotton yarn could be bought cheaper than they could raise it. Planted as soon as the ground was in condition—about the 1st of May. Very early frost would sometimes affect it. Thinks it can be raised here successfully.

Livesay Carter, aged 62 years—post office Nashville, Washington county—came from Tennessee in 1818; raised cotton six years; planted in May, and picked from first of September until November; used native seed; it sometimes was slightly affected by frost. Thinks cotton can be raised here as well as anywhere.

Wm. D. Mitchell, aged 45—post office Ashley, Washington county; came from Tennessee in 1829, raised cotton for ten years; ceased to raise it because cotton goods could be bought cheaper; used native seed; planted as soon as the ground was in condition to work, and had no trouble from frost; the yield was quite uniform.

James Martin, aged 58—post office Osborn; Washington county; came from Tennessee in 1828; says for the first eight years raised cotton every year until cotton goods became cheaper. Used native seed—planted from 1st to 10th of May, and picked during the fall; don't think this will ever be a cotton country; cannot tell the reason why—he acknowledged that it grew with him; the frost would nip it sometimes.

David McClurkin, aged 48 years; came from South Carolina in 1817; says for first four years raised cotton successfully, until the women began to buy their cotton goods; used native seed—had no trouble from frost. Think cotton can be grown here of as good a quality, and with a larger yield than in South Carolina. Post office Sparta, Randolph county.

Isaac Ford, aged 48 years—post office Osborn, Washington county, came from Missouri in 1835; had raised cotton the past two years, 1860 and 1861; used native seed; planted 10th May and picked early in the fall; had no trouble from frost.

Thinks it can be raised as successfully and just as well as any other crop.

Zachariah Parish, aged 57—post office Ofborn, Washington county, came from Ohio in 1840—has raised cotton most every year since—used native seed; planted early in May and picked during the fall. He raised on old and new land; does better on new land; had no trouble from frost.

Mrs. Wm. Finch—post office Mt. Vernon, Jefferson county; came from Indiana—raised cotton for about twenty years before 1845, until cotton goods became cheaper. Used southern seed—planted as early as possible in May, and picked during the fall—had no trouble from frost—does better on new land. It is a sure and good crop, planted early in the spring on fresh turned soil, and requires no cultivation. Their average yield off an acre and a quarter, after taking out the toll for ginning, was four hundred pounds equal to a yield of over four hundred pounds to the acre.

Appollos Cooper, aged 60—came from Tennessee in 1860; post office DeSoto, Jackson county; raised cotton this year; planted 1st of May, cut off by army worm; replanted the last of May, and it was as good cotton as he ever saw grow in Tennessee—yielded at the rate of 1,200 to 1,600 per acre of seed cotton.

Bannister Kruse, aged 46; native of Illinois—post office DeSoto, Jackson county, has raised cotton for the past twenty-three years; used native seed; planted in May and picked in September.

Hardey Kruse, aged 43—post office DeSoto, Jackson county; native of Illinois; has raised cotton for the past eight years; used native seed; planted 10th of May, picked in September; thinks it a sure crop with proper cultivation.

James Kruse, aged 35—post office DeSoto, Jackson county; has raised cotton for the past eight years; used native seed; planted 10th of May, picked during September and October; thinks it a sure crop with proper cultivation.

Robert Pugh, as to the culture of cotton, near Pana, by his father, Thomas Pugh. Robert Pugh aged 46. Thomas Pugh is dead—his son, Robert Pugh, says they come from Kentucky in 1819; for first six years raised cotton every year; did so until cotton goods were sold cheaper; used Kentucky seed. The only crop that failed was planted on newly cleared timber land; it grew too rank and remained green too long, and was considerably injured by frost; planted about the first of May and picked during the fall. Had no trouble from frost, but in the single instance above mentioned.

Thomas Wells, aged 84—post office DuQuoin, Perry county; came from South Carolina in 1805; raised cotton for twenty five years—until cotton became cheaper; used Kentucky seed; planted first of May, and commenced picking the last of August; thinks it will grow and do well, unless the climate has changed very much.

Michael Taylor, aged 52—post office DuQuoin, Perry county; native of Illinois; raised cotton for ten years—until spun thread could be bought cheaper than it could be made; planted from 1st to 10th of May, and picked in September, had no trouble from frost.

Richard R. Taylor, aged 63—came from South Carolina in 1803; raised cotton for thirty years after 1820; used native seed; planted in May; has raised as good cotton on Big Muddy as he ever saw raised in Tennessee; thinks it grows best in the timber. Post office DuQuoin, Perry county.

John Robinson, aged 69—post office Elkhaville, Jackson county; came from Tennessee in 1805; has raised cotton for about forty-five years past; used Tennessee seed; occasionally touched with frost; planted in May, and picked in September and October; thinks it will do well here.

Thomas Robinson, aged 38; native of Illinois; has raised cotton ever since he was old enough to pick it; used native seed; planted as early in May as the ground would permit, and picked in September; has yielded, with good culture, 800 pounds to the half acre of seed cotton, equal to 200 pounds clear cotton.

Louis Wells, aged 80; came from South Carolina in 1810; raised cotton for twenty years, till cotton goods could be bought cheaper; used native seed; planted in May and picked during the fall. He had no trouble from frost.

Daniel Day is dead. His wife says they came from North Carolina in 1820, and raised cotton for fourteen years; gave up raising because they preferred buying their cotton goods; used native seed; planted first of May, and picked during September; had no trouble from frost; post office DuQuoin, Perry county.

—The above constitute an array of evidence in favor of the cotton crop, certainly enough, under the present prices and condition of things, to warrant a thorough trial as far north as Peoria, McLean and Ford counties. The deep, rich clay loam of Central Illinois, with its more equable amount of rain, we think will prove nearly or quite as valuable for this crop as the basin of Egypt. In our next we hope to be able to announce an abundance of seed for all who may wish to try their hand at this crop. Ed.

—The cup of patience is carved by angelic hands, set round with diamonds from the mines of Eden, and filled at the eternal font of goodness.

—A chap writing from Denver says: "On the 6th of June, Cherry creek had a volume of water sufficient to run a grist mill, and ten days afterwards, it was as dry as a doctrinal sermon."

[From the Chicago Farmer's Advocate.]

### Uncle Job's Hen-Turkey.

MESSRS. EDITORS: The representative of that picture of that American bird—that noble bird that calls into action the salivary glands of all lovers of good cheer—the bird that is the crowning glory of a multitude of tables at Christmas and New-year—the bird that occupies the largest platter at the festive board of the merry dancers—the bird that satisfies the hunger of millions of our fellow citizens on the day of the great national jubilee of Thanksgiving, deserves our attention, our care and our gratitude. The turkey has become a widespread and valuable domestic institution, and thousands of boxes filled with the well-attened bird, find a ready market in that great vortex of consumption, New York, annually. The genuine wild turkey still finds a home in many localities of the West, uncontaminated with barnyard associations—his plumage untarnished with the dust of conventional civilization, and his proud spirit unchafed by the bravado of his rival, chanticleer. Long may he pluck worms in the deep forest—dress his glossy feathers in the free sunlight, and strut in proud superiority on the green carpet of his own native boudoir.

But I took up my pen to speak briefly of our hen-turkey, and what came of it. Her color is "contraband," but otherwise apparently like all other hen-turkeys; and yet a close observer would notice a don't-careative look about her, indicative of results out of the ordinary routine of henturkeydom. Her education was chiefly of her own getting, and as she was but nine months old when she set up for herself, she could not have obtained graduating papers according to law, unless, indeed, she was the victim of a remarkable precocity. But hush! do you not know that our wise philosophers sweepingly confine reason to man, and assert that all the actions of animals are the results of instinct? Of course, then, I am on the wrong scent, and must not doubt the philosophic say-so of wisdom's chief pillars. Well, this hen-turkey early last spring, whether from instinct or reason, or whether mainly from foolishness I wot not, but she did commence to sit in spite of our combined efforts, did actually sit four months and fifteen days. She commenced on hons' eggs, and if driven from the nest one hundred times, would as often return, showing conclusively that the instinct of perseverance was tremendously developed. When one nest was utterly destroyed her chief concern was to find another, as she was very anxious not to lose any time. When she began to sit, she had never laid an egg, and what to us was remarkable, during the whole four months and a half she did not lay a single egg. At the expiration of this time, I suppose the instinct of a sitting had oozed out, and as she was getting thin in flesh, she needed recreation and grasshoppers to restore her strength and get a new supply of sitting instinct. Ordinarily the laying instinct is first in order, then the sitting, but in her case there seemed to be but the one instinct, but awful strong. After rusticating for about two months, getting fat and sleek, she all at once was missing, and we gave



the wolves credit for getting hold of a tough one. We were mistaken, for we soon found her sitting on a nest of eggs of her own laying; the two instincts having this time acted in their natural order. Owing to the lateness of the season the eggs were addled, so that for five months' labor industriously put in, resulted in nothing but a bit of experience.

To wind up the curiosities of our turkeydom, the old gobbler got excited at the sly hen-turkey, and by way of showing her how to sit, found a hen's nest in the grass and sagely began his labors; but unfortunately for the success of the experiment and his own welfare, he became the prey of hungry wolves, thus losing his own life in teaching a foolish wife the modus operandi of incubation.

Whenever I see a farmer work hard all summer to raise a crop, and then let a large portion of it go to waste, says I, hen-turkey!

When I see a young man idling away his time with a cigar in his mouth, or a mug of beer to his lips, I immediately think, hen turkey!

When I see a house-keeper dressed in silk, throwing a peck of old bread into the swill barrel, says I, hen-turkey!

When I see a young lady gaily attired, with rings, ear-drops, breast pins and tracelets, calling upon her mother to sew up a rent in her new dress, says I, bah! you are no better than our hen-turkey.

UNCLE JOE.

**TO REMOVE CLINKERS FROM STOVE.**—Some kinds of coal are liable to form clinkers which adhere to the fire brick lining of stoves, grates and furnaces and become a source of great annoyance, as they cannot be removed by usual means without breaking the firebrick. Persons who are thus annoyed will be glad to know that by putting a few oyster shells in the fire close to the clinkers, the latter will become so loose as to be readily removed without breaking the lining—*Scientific American*.

**CHEAP MARINE GLUE.**—The celebrated marine glue is composed of a solution of India rubber and lac varnish, and it really does not contain a particle of genuine glue. As lac is becoming dearer every year, a substitute for it has been sought for in the manufacture of marine glue, which is so well adapted for coating the interior of aquariums, wooden water tanks and for caulking seams of ships. It is stated that asphaltum dissolved in refined naphtha with some India rubber, makes a cheap and very good marine glue.

**IRON CEMENT.**—To prepare iron cement for stopping leaks, take sixteen parts of clean wrought iron filings, three parts powdered sal-ammoniac and two parts flower of sulphur; mix all well together, and preserve the compound in a stoppered vessel and in a dry place till wanted for use. Then take one part of the mixture and add it to twelve parts of clean iron filings, and mix this new compound with as much water as will bring it to the consistency of a paste, having previously added to the water a few drops of sulphuric acid.

[From the Country Gentleman and Cultivator.]

## Spreading Manure in Autumn.

**EDS. CO. GENT:** In your issue of Nov. 7, under the above heading, R. Goodman says "you startle New England farmers by the advice of Mr. Thomas to Cayuga county farmers, to spread their manure for spring planting in the fall. It is the general supposition with us, and practiced upon, that by so doing the best part of the manure will be washed away, but if put on just before planting, and then plowed and harrowed in, all the good of the manure will be retained; \* \* \* and I do not know a farmer of my acquaintance in Massachusetts or Connecticut, who would not think it wasteful farming to spread manure in the fall on land to be plowed in the spring."

Mr. Goodman's article is followed by editorial remarks, which go to show very clearly that the loss, if any, can be but trifling, and gives two reasons why autumn manuring is better than spring—"1st, It accords with experience, and 2ndly, It agrees with theory."

It is to be presumed that a great majority of our farmers entertain the same opinion in this matter that Mr. G. has expressed. Whether this opinion is correct or not, is practically a matter of great consequence in the aggregate to the farming community. I believe Mr. Thomas is correct in his "advice to Cayuga county farmers," and whatever course in this method of applying manure is profitable to the farmers of that county, will also be found equally so to the farmers of other counties and States.

It is but about a dozen years since the quality of clayey and loamy soils for combining with and retaining the fertilizing ingredients of manures, has been thoroughly investigated and rightly understood, even by the scientific.

Prof. Liebig in his "Modern Agriculture," says "there is not to be found in chemistry a more wonderful phenomenon, one which more confounds all human wisdom, than is presented by the soil of a garden or field.

"By the simplest experiment, any one may satisfy himself that rain water filtered through field or garden soil, does not dissolve out a trace of potash, silicic acid, ammonia, or phosphoric acid. The soil does not give up to the water one particle of the food of plants which it contains. The most continuous rains cannot remove from the field, except mechanically, any of the essential constituents of its fertility.

"The soil not only retains firmly all the food of plants which is actually in it, but its power to preserve all that may be useful to them extends much further. If rain, or other water holding in solution ammonia, potash, phosphoric and silicic acids, be brought in contact with soil, these substances disappear almost immediately from the solution; the soil withdraws them from the water. Only such substances are completely withdrawn by the soil as are indispensable articles of food for plants; all others remain wholly or in part in solution."

"It must be so," Liebig, "thou reasonest well," else the millions of acres of fertile prairie land would have been as barren as the sands of Cape Cod. And the fertility of the alluvial soil

bordering on the Nile, would have had its fertility leached out by the annual overflowing of that river, thousands of years before the sons of Jacob went to Egypt to purchase corn, and that, according to Biblical chronology, was 3,568 years ago. There has been an annual overflowing of the same land ever since, and yet these 3,500 and odd freshets have not lessened the fertility of the soil—they are as productive now as in the time of the Pharaohs.

Thousands of our swamps have been saturated with water most of the time “ever since the flood,”—yet drain them, throw up the muck, sow oats or grass seed, and such is the fertility of these water soaked soils, that they will yield as heavy crops as can be grown by the use of farm yard manure. The fertilizing ingredients of a rich alluvial soil, swamp muck and stable or other animal manure, are identical—with this difference, these fertilizing ingredients in the manures can be mostly leached out, but not so in the soil. Now, if the farmer applies his farm manure to grass land in autumn, the rain and melting snows will leach out a large portion of the fertilizing constituents of the manures.—These, before the spring plowing, will have mostly soaked into the soils, which seizes upon and retains them as a miser does his gold, and the soil will not part with them, only to growing crops and the crucible of the chemist.

Scores of facts and experiments might be cited to prove the correctness of Mr. Thomas' advice. Just read the reported “practice of J. Beatty & Sons, of Cayuga county, in applying the manure for their corn the previous autumn,” in the left hand column, exactly opposite Mr. Goodman's letter.

This power of absorption in soils was published by Prof. Way in 1850, he having experimented largely, by filtering the foul water from the sewers of London, and feetid water in which flax had been steeped, putrid urine, etc. It was found that when three-fourths sand and one-fourth white clay, in powder placed in jars to the depth of six inches, the foul liquids came through the filter free from smell and scarcely to be distinguished from ordinary water. But to make a short story of this matter, it was discovered that the clay or aluminous portions of soils possess the power of chemically combining with not only the gaseous compounds of decomposing animal matter, but also with the alkalies, ammonia, potash, soda, phosphates, magnesia, etc.

This, said Prof. Way, is a wonderful property of soil, and appears to be an express provision of nature. “A power is here found to reside in soils, by virtue of which, not only is rain unable to wash out of them those soluble ingredients forming a necessary condition of vegetation; but even these compounds, when introduced artificially by manures, are laid hold of and fixed in the soil, to the absolute preclusion either by rain or evaporation.”

Mr. Charles Lawrence, an eminent English agriculturist, about that time stated in the London Agricultural Gazette, that autumnal manuring immediately followed and covered by the plow, is the most valuable discovery, perhaps, in its results, for which agriculture has been indebted to

science. This statement was founded upon the then recently published experiments of Prof. W., who he says “has clearly established the fact that the soil has the peculiar property of absorbing and appropriating all those elements of manure intermixed with it which are essential to the growth of plants.”

Most of the farmers in this section plow their green sward in autumn, to be planted in the spring with corn. They cart out their manure in the fall and place it in large heaps on or near the plowed field. In the spring reload the manure, lay it out in heaps, spread and harrow in. It is no trifling job to reload an hundred loads of manure next spring, and cart it over the furrows, which are much more soft in the spring; besides it is usually a busy season with farmers, and their teams are not then usually in as good working order as they are in the fall.

If the farmer has manure to draw out in autumn and wishes to invert his green sod at that season of the year, it is my opinion the better way is to first plow, then cart on the manure, spread it and harrow in. If he does not wish to “break up” till spring, then cart and spread the manure on the grass lands intended for spring plowing. If the manure is intended for grain or corn stubble, then apply it in the fall and plow in shallow.

If there is any reliance to be placed on the statements of Prof. Liebig and Way, and those of John Johnston and hundreds of other good practical farmers, there will no loss arise from autumnal manuring—but much saving of money, for with the farmer—“time is money.”

A few weeks since, I took a trip across the country of over thirty miles. In several instances, saw farmers plowing grass ground. But before plowing they had carted on the manure and spread it on the grass, then turning it under eight or more inches deep. It is my impression that farmers would realize more value from the manure if it had been applied to the inverted sod to remain there through the winter. If I understand the laws of gravitation, not much of the soluble portions of these deep buried manures will rise to the surface.

Again I saw other fields of inverted sod, and on or near them, were large heaps of manure, to be carted on next spring. This course makes much extra labor without adequate returns.—Again I saw other large heaps of manure, which doubtless, are to be applied to spring plowed grass land. Would it not have been better to have drawn the manure directly upon the grass land and evenly spread, there to remain till spring plowing? Had a Cayuga county farmer asked Mr. Thomas' opinion in this matter, his reply would doubtless have been, “spread by all means,” I shall have no wrangle with him for giving such advice, for how can two persons quarrel, when they are both of the same opinion.

L. B.

—From our own experience and observation we most fully concur with the views of the writer above, not only in the increased value of the manure spread in autumn, but in the large saving

of labor. On meadow land, the sooner the top-dressing can be done after the crop is gathered, the better. We are liable to some weeks of drouth soon after the commencement of haying, and the top dressing answers not only as a fertilizer, but as a mulch to protect the roots from the hot sun and drying winds of the season. If we could manure but a portion of our land, next after the garden would be the meadows.

It has been the custom among the Germans near Chicago to haul and spread a large part of the manure during the winter, fresh from the stables, and with most beneficial effects. The work is done at a comparatively leisure time and when the ground is frozen or covered with snow, and ready for the spring crop, generally of corn or potatoes. The spring is the worst possible time to get out manure in this country, on account of the soft condition of the soil. For this reason we have practiced hauling and spreading our manure in the fall or during winter. We do not wish to plow it under, but simply harrow or work it in with the cultivator. Of course it is spread on fall plowed land.

In all cases orchards should be top-dressed, and when plowed to kill the weeds, two to two and a half inches is a sufficient depth. In manuring it is becoming apparent to a large majority of our most intelligent farmers that the proper place for it is on the surface. If the soil is deeply cultivated the whole of the salts are leached from the manure, but in case of a hard surface and a heavy rain a portion might be washed off into the streams, but this will in any case be found a small amount. Many of our farmers are now looking to the manure heap to enhance the profits of their crops, more especially grass lands and orchards.

ED.

### Cotton in Illinois.

We would recommend to the earnest consideration of our farmers the exceedingly interesting article in the Chicago Tribune, on the subject of cotton raising. It has been proved beyond question that the middle and southern portions of this State are well adapted to cotton culture, and the industry and enterprise of our farmers, if once directed to this branch of agriculture, would soon render cotton a profitable and staple article of product. Cotton is produced in the greatest quantity and of the finest quality, between the 30th and 40th degrees of latitude, north of the equator, although in China, cotton is cultivated with success, and as a staple, as high as the 43d N. latitude. The Chinese cotton is of the same species as the American, viz: "*Gossypium herbaceum*," the yellow or Nankin cotton, used in the manufacture of "nankeen," appearing to be

merely a stunted variety of the same species.—The specimens we have seen of the Sea Island cotton, raised in several parts of middle Illinois, while it is said to be of somewhat shorter staple, or length of fibre, yet loses nothing in size of bolls, or fineness of quality.

There is no doubt that wherever the soil is not of a clayey character, but loose, friable and rich, south of parallel 41° N. Lat., cotton can be cultivated with success. A close investigation of the habits and history of the cotton plant goes far to prove that success in cotton culture depends in a greater degree upon the character of the soil than upon the climate. The famous Sea-Island cotton being an example of this, being superior in quality to even the same variety grown a few miles back from the coast in the same latitude.

The difference in soil is very evidently the cause of this. The predominant soil of South Carolina is clay, except the rich alluvial bottoms, or rather swamps, bordering on the rivers.

Especially in the south-east portion of the State it is of a close, stiff character, while the Sea-Islands are of an open, sandy character.

The soil, therefore, of Illinois appears peculiarly adapted to the raising of cotton, while nearly two-thirds of the State is within the parallels in which cotton will grow. The profitability of the crop is beyond all question, and ere long we hope to see the attention of our farmers directed to this subject.

The cultivation of sorghum is settled, and the results of the trial attended with far more flattering results than the first attempts at raising sugar-cane and making sugar, even in the State of Louisiana. A few years' experience will produce as good sugar and larger yields, in Illinois, than in the South; and should this war lead to the successful cultivation of cotton, it will be productive of a lasting benefit to our State, at least.—*Bloomington Pantagraph*.

We believe the *Pantagraph* is in error in regard to the Sea-Island cotton. We had supposed that climate had much to do with this variety, as it is exclusive to the low lying islands along the coast, and when taken inland becomes long or short staple, according to elevation and distance from the sea. With cotton at forty cents and corn at ten we may feel certain that the cotton question will find a solution.

ED.

SORGHUM.—Mr. B. C. Dutcher, who is extensively engaged in the culture of sorghum, has had far more orders this season for the saccharine fluid than he can possibly fill. Among these orders are a number from the State of New York. It is probable the sorghum made in this county is among the best, if not absolutely the best made in the United States, and as its quality becomes better known will of course become much increased. We look for a largely increased crop of sorghum next year, from the greater number of cultivators and an increased breadth of land devoted to its production.—*Davenport, (Io.) Gazette*.

## THE ILLINOIS FARMER.

BAILHACHE &amp; BAKER.....PUBLISHERS.

M. L. DUNLAP, EDITOR.

SPRINGFIELD, JANUARY, 1862.

## Editor's Table.

We commence the year 1862 with renewed hopes in our country and the cause of agricultural progress. The war has made less inroads into progressive farming than we had reason to fear, certainly it has not been more serious than a heated presidential canvass, and we doubt if it will be attended with as serious results. The immense preparations for war has not, as yet, made any apparent draft on the resources of the country in diminishing its agricultural staples, (secessia excepted), and we doubt if will in any way cripple us the coming season; it is true a large number of agricultural laborers are drawn off to the war, but a part of this force will be made up by the use of machinery and improved modes of culture. Our State will suffer least of all for the want of laborers from the fact that thousands who have been driven from Missouri and other border States, will, to a large extent, fill up the void, and with the liberal policy now pursued by the Illinois Central Railroad Land Department in the purchase of grain in payment of lands sold and selling, that we may reasonably expect that many of these fugitives will locate in our State, and thousands from the States south of us will also be tempted hither. Nearly a year ago we predicted that in the event of the war with the

South, that aside from the loss in the army of many of our most valuable citizens, this State would come out richer in the end, and thus far we have no reason to change our views. A species of favoriteism has given favored States the heavy contracts, but we do not despair, our time must come, and the manufacturers of wagons, and other needs of an army, will be called upon to assist. A few days since, we saw at Quincy thirty cannon of the Woodworth patent nearly ready for the field.

We need, therefore, have no misgivings to the future of our State, its course is upward and onward. Situated in the great valley of the West, with natural resources unequalled, she must take a high position in the future of the American Union.

“THERE IS CORN IN EGYPT.”—The ladies of Maroa, Southern Illinois, who are organized as a soldiers' aid society, themselves gathered a load of corn, last week, given them by the farmers, drove it to town, and sold it at auction (a young lady being the auctioneer), at four cents above the market price; the money to go for supplies for sick and wounded soldiers. There's the true grit for you.

—The above we find going the rounds of the press without credit. It is all well enough except the heading and the second line, and we are sorry to spoil the poetry of the thing, but our regard for geography impels us to say that Maroa is not in EGYPT or SOUTHERN ILLINOIS by a jug full, but in CENTRAL ILLINOIS, the great corn zone of the State, and of the West. Egypt is no great shakes for corn, and this year the crop is nearly ruined from drouth. Egypt is rich in agricultural resources, but in corn the palm must be conceded to the Central. Editors who have unwittingly defamed the centre, will please make the amende, or they may find a shower of yellow dent come flying about their unlucky heads.

A PAYING CAT.—A farmer, in Bureau county, writes us that he has a cat from which he derives a great share of his living. The cat goes out nightly, catches a rabbit, eats its head off, and the family eats the rest during the day.—*Farmer's Advocate.*

—We have heard of a man who was too lazy to breathe, and had to keep a cat under each arm to assist him in this necessary operation. Could he have obtained the above cat to provide his fodder, he would have been perfectly happy.

We would advise the farmers to prevent the killing of this race of cats, as they certainly will be in demand.

ED. FARMER:—Inclosed you will find a list of officers of the Vermillion County Agricultural and Mechanical Association, elected at the annual meeting, held at Catlin, November 2d, 1861, to serve for the year 1862:

President—Jacob H. Oakwood, Catlin;

Vice President—John Allen, Salina;

Recording Secretary—Lemuel Cross, Danville;

Treasurer—John H. Gass, Catlin;

Directors—Josiah H. Smith, Ridge Farm; Benj. Hayworth, Georgetown; Benj. Small, Georgetown; Joel Acre, Catlin; Charles L. Pate, Catlin; H. H. Conover, Dallas; Wm. Sandusky, Pallas; James H. Dougherty, Salina; James P. Filombs, Pilot.

Marshal—David B. Stockton, Dallas.

Respectfully yours,

LEMUEL CROSS, Sec'y.

—We believe there is two agricultural organizations in the above county, and both in good condition. Could they be consolidated, this county would stand the foremost, as it is the first in preparing for the season of 1862.

**COAL FOR FUEL.**—In the use of soft, or Illinois coal, a very important point is to put it in a shed with a plank floor, so that the coal can be shoveled from the bottom of the pile; in this way the fine coal becomes mixed with the coarse parts, and gives a better fire. On the other hand, if one has to take coal from the top of the heap, there will be a large lot of coal dust or waste, of no use. The coal dust, when kept dry, as all coal should be, when mixed with the coal, aids the fire very much when first put on. There should always be a coal box for each stove in use, more especially for a cook stove, that will hold a couple of bushels, with a board placed slanting in one end, so as to shovel out the coal from the bottom, using a portion of the slack, or coal dust in each fire. In this way the last bushel of a car load is as good as the first.

**FINE AND COARSE WOOL.**—Walter Brown's Wool Circular for August, says it might be well for such as can afford to hold their very fine wools, to select them out and retain them until the demand shall improve. Should the war be prolonged, there is danger of a large accumulation of these wools, and in this view of the case, it would be wise in our farmers to change the character of their flocks, and give their attention to raising the middle qualities of wool.

In the hands of most farmers the middle wools have always paid best. The sheep cost less, are more hardy, and in addition to the wool, the carcass is valuable.

**TRANSACTIONS OF THE STATE AGRICULTURAL SOCIETY.**—We have received from the Corresponding Secretary, John P. Reynolds, Esq., volume IV of the Transactions of this Society for 1859-'60.

In addition to the Transactions proper, those of the State Horticultural Society, and the Natural History Society are embraced in it. Among its valuable essays, is one on the army worm and other insects injurious to vegetation, by Gen. B. D. Walsh.

The volume contains seven hundred pages of matter valuable to the farmer, with over a hundred illustrations. It is not only a credit to the liberality of the Legislature which ordered ten thousand copies to be printed, but an evidence of the industry and ability of the Secretary in its preparation. The officers of the County Societies have done little more than to give a list of officers and amount of money expended. The Society should be more liberal in the way of premiums for essays. The volume is now being rapidly distributed throughout the State. Of the execution of the work, alike creditable to the State printers and the binders, we have before made mention.

**THE HORTICULTURIST.**—This old and well established journal has just closed its sixteenth volume, a complete set of which adorn the shelves of our sanctum, and which we prize very highly. For sixteen years its monthly visits have been ever welcome. We have often purposed offering something from the West for its pages, but thus far have failed, in part for the want of time, and partly not daring to venture among its able corps of contributors. Within the period named it has changed hands on several occasions, and of late has met with another of these changes, but it has fallen into most excellent and able hands, and we expect to see its usefulness take a wider field. \$2 for plain, and \$5 for colored edition. Address Mead & Woodward, New York, or send us \$2 50, to club with the FARMER.

**GARDNERS' MONTHLY.**—This is a most invaluable work, and should be in the hands of at least ten thousand of the farmers and gardeners of this State, to say the least. THOMAS MEEHAN, the editor, is one of the practical men of the age. \$1. Address G. W. P. Brinkloe, Philadelphia, Penn., or send us \$1 50 for that and the FARMER one year.



**GOLDEN SIRUP FROM SORGHUM**—At the meeting of the State Horticultural Society, in Chicago, the first week in December, the Chicago Sugar Refining Company exhibited a sample of refined sorghum sirup, equal in all respects to the best New York golden sirup, and superior to the Chicago golden sirup. The gentlemen having it in charge reported that one hundred gallons of the crude sirup makes ninety of the refined, but as it is reboiled, the refined is thicker, that is, will weigh more to the gallon. The real loss of foreign matter is about five per cent. The cost of refining of large a lot would be about five cents a gallon. The amount would stand with the farmer located one hundred and twenty-five miles from Chicago, as follows:

To freight to Chicago at 25 cents per 100 lbs	.03
Refining . . . . .	.05
Return freight . . . . .	.03
Cartage . . . . .	.01
Value at home . . . . .	.35
	—
	.47

Nine-tenths of a gallon returned—cost per gallon . . . . . 52 $\frac{1}{2}$

This sirup is sold at fifty-five cents per gallon, which leaves a profit to the dealer of about three cents the gallon. It is certainly the cheapest sirup in market, as is proved by the demand, which is much beyond the supply. One thing is now a matter of fact, the West can be independent of the South for the entire amount of sirup used, thereby retaining at home some millions of dollars annually. We do not say they are independent, as yet, for even the large amount made will not fully supply the demand, though Ohio, Indiana, Illinois and Iowa will come pretty well up to it. The stock is nearly out of first hands, but the retailers hold a good supply, as yet. This is the first season that the sale of it has become a regular business. Next year the States indicated will doubtless make more than they can use. All that can be made will find a ready sale, as the extra consumption will absorb a large amount. Of its culture we shall have more to say in our next.

**CHICAGO BANK NOTE LIST**—In the great variety of paper money, one is in danger, as the saying is, of being sold. To avoid this, the above paper is of use. For \$1 50 we have it semi-monthly, often enough to guard against probable loss. We have saved many times its cost, by a timely consultation of its pages.

**AGRICULTURAL COLLEGE, CHICAGO, ILLS.**—The Board of Directors of this institution are: Zadoc Casey, of Jefferson county; James W. Singleton, of Adams, Cyrus Edwards of Madison, Wm. H. Van Epps of Lee, John P. Reynolds of Marion, G. E. Walker of Union, Cyrus Thomas of Jackson, H. Blackstone of Shelby, Timothy A. Young of Clark, M. L. Dunlap of Champaign, R. H. Holder of McLean, Jas. N. Brown of Sangamon, J. B. Turner of Morgan, H. C. Johns of Macon, Wm. Reddick of LaSalle, H. Capron of Peoria, Tyler McWhorter of Mercer, Wm. Gooding of Will, Lewis Ellsworth of DuPage, S. M. Church of Winnebago, C. H. Rosenstiel of Stephenson, E. H. Beebe of Jo Daviess, F. P. Brown of Henry, John A. Kennicott, John B. Turner, Cyrus H. McCormick, Solomon Sturges, David A. Gage and Henry Smith, of Cook.

“For the benefit of farmers, young and old, who cannot pursue an extended course of study, a series of winter lectures, of a month's duration, is contemplated, to be delivered by gentlemen from the ranks of science, and from the farm, the garden, the nursery and the vineyard, distinguished in the various departments of husbandry. This course will consist of from one to two lectures daily, each lecture being followed by a discussion of the topic of the lecture, in which all present will participate; thus eliciting from practical men much information which has not yet taken the form of science.

For admission to the winter course a fee of ten dollars will be charged, except to contributors of an amount not less than fifty dollars to the endowment of the college, to whom perpetual free access will be granted; and to contributors of twenty-five dollars only half the admission fee will be charged.

This enterprise was inaugurated in June, 1860, by the Trustees of the University of Chicago, pursuant to its charter, procured in 1857; and subsequently the foregoing Board of Directors was appointed. Lands for the experimental farm have been selected at Cottage Hill, fifteen miles from Chicago, on the Galena and Chicago Union Railroad, and the officers of the Board have generously secured to the faculty and students of the college free access to and from the city.

These lands, consisting of nearly three hundred acres, present a variety of topography and soil, adapting them in a high degree to the purposes for which they are designed. From the most elevated point, nearest the railroad, they descend southward, in beautiful undulations, to a stream of living water, on a level at least sixty feet below. The soil is of four distinct varieties, all of which are highly desirable. These lands are nearly all under cultivation and have on them a house, barn, orchard and over two thousand ornamental trees. In the choice of this location for the farm, its proximity to the railroad and the city, the character and variety of its soil, the great beauty of the landscape, and the rich and tasteful country seats adjacent, have had an influence.

Instruction in the studies of the first year of the regular course has already commenced, and the chemical lectures will begin January 2, 1862. For information relative to the agricultural college, address J. H. McChesney, care of the University of Chicago."

ED. FARMER—*Dear Sir*: I am desirous of obtaining some information in regard to the Ozier or Basket Willow, and as I can see no advertisement of cuttings or anything connected with them in the papers, I wish to ask if you can give me any information as to where cuttings can be procured, or refer me to any persons who are engaged in their cultivation; also, do you know of any work or pamphlet treating upon their cultivation or mode of preparation for market? If you can give me any information or furnish any reference I shall be much obliged to you.

My address is Hennepin, Putnam county, Ills.  
CHAS. E. TOPPING.

*Hennepin, Ills. Dec. 8, 1861.*

—But little has been done as yet in our State in regard to willow culture for baskets, though more or less are made in our large cities. At Quincy is a small shop for this purpose. Michigan furnishes the supply for Chicago. In our deep, loomy, damp soils, the Ozier makes a good growth. Cuttings can be had at any of the nurseries. Charles Downing, in *Horticulturist* for 1854, page 172 has a chapter on the subject; he says the English Ozier has failed in this country, and recommends the Purple Willow and two other varieties; these can be had of Dr. Kennicott, of "The Grove," Cook county. He says the number of cuttings required to plant an acre is about twelve thousand; but this we think too many. We have found the English or common Ozier to do well in deep, well cultivated soil, but it must not be too wet. Dr. Grant has a variety called the Beveridge Willow, which he says is the most productive of all. We know of no exclusive work on the willow. The *Horticulturist* for 1854-5 will give ample information. Stripping the bark is an important item in preparing for market; this is done with a machine, but where to be had we cannot say.

PERSONAL.—The present number of the *FARMER* has been made up amid many very pressing duties, both at home and abroad. Nearly all of our children have suffered with sore throat, with two marked cases of diptheria, but thanks to the use of simple remedies, the most valuable of which is a gurgle of warm water and salt, they are now out of danger. During this time we have made

two visits to Missouri to visit our army, one to Springfield, and have attended the State Horticultural Society at Chicago. We therefore ask the indulgence of our readers for any shortcomings. Hereafter we hope to have more time at our command.

CONVENTION OF COUNTY AGRICULTURAL SOCIETIES —The Bureau County Agricultural Society has taken the initiation in calling a convention of County Societies, to take into consideration the propriety of concerted action in regard to crop statistics. We see no reason why such a measure might not be carried out, much to the advantage of all interested. It is certain that our present means of obtaining such information is very inadequate and superficial. The proceedings alluded to in the letter of the Secretary, Mr. E. S. Phelps, jr., have not come to hand.

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### Publishers' Special Notices.

**AGENTS**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

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**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin *now*, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

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**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign. tf



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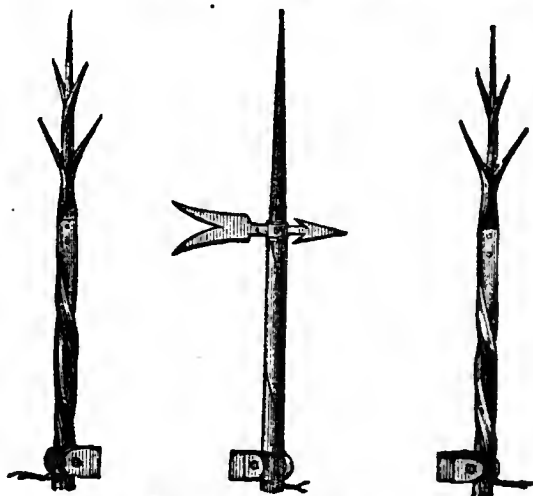
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# THE ILLINOIS FARMER.

VOL. VII.

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NO. 2.

## February.

The sun now begins to climb the southern sky, and the active duties of the new year are about to commence. January is but the continuance of the holidays, and a time for the general closing up of the old year, that neutral ground being between the dead past and the active future—a proper time for retrospect and for the laying of plans for the coming season. No general succeeds without a well matured plan, not even General Trust-to-Luck, with all his energy, will accomplish but little in his hap-hazard efforts. It is those who go to work with a purpose that succeed, and this is especially true of the farmer.

Now, while the snow mantles the ground, when no active duties call off our attention, and the evenings are long, we will sit down and reason together, and endeavor to settle upon some definite plans for the season's operation. The graneries of the West are full to repletion—the lines of transportation are eating out the profits of the farmer; then why should we make an effort to add to the heaping measure now overflowing with cereal products? Why not stop tilling the soil until the world shall be willing to pay a remunerative price for our labor and the use of our lands? These are questions that come to us from all quarters. If the world did not move, if every seed time and harvest brought an average aced product, we might pause for a time, and resume work at our good pleasure; but He who holds the destinies of nations in his hands, if He has promised a seed time and harvest, He has not promised a definite amount of bush-

els of grain to the acre — He has not promised that the wire worm or the grub shall not cut down the log blades of the spring corn—He has not promised to withhold the chinch bug from devastating the fields —He has not promised to order the clouds to send down to the thirsty earth regular installments of rain—He has not promised to withhold the chilling frost, or to cool down the heated drouth; it is, therefore, possible that with our best efforts the grain-ries may become exhausted, and want stare us in the face. We should not forget that one, two or three untoward seasons may not bring us back to a little reliance on a stronger arm than that of mortal.

To the West the year 1860 was a most bountiful one, and revived the drooping spirits of all classes—its large surplus of cereals and meats wiped out millions of dollars of indebtedness, and placed the prairie States again on the high road to prosperity. This was followed by a fair average crop in 1861, but the civil war now raging cut off the usual markets at the South, and hence, the products that had found a market by two outlets, were forced upon one, and there is nothing more natural than that prices of transportation should, under such circumstances, go up. We need not wonder at the result. The Northern transportation lines that had for the past few years been making little or no profits, have all at once been enabled to charge their own prices, however exorbitant, well knowing that this state of things could not last; but supposing it should, the competition between lake and railroad would soon bring down the price to a reasonable

standard. It is, therefore, not so much to an over supply for the world's, use that has depressed the price of our great western staples, as it is to an accidental high rate of freight. Our readers can, therefore, draw a long breath, and confidently hope for better times. *The world yet is in want of our great staples.*

#### A LOOK NEAR HOME.

An immense army is now in the field, all non-producers; these must not only be fed, but the immense waste that they occasion, must be supplied. A large per centage of this army is directly drawn from the producing class, and thus will lessen the ability to produce as much the coming season, for it will be recollected that they have been drawn from the farms gradually, as the several crops matured so as to spare them, but the coming spring they will not be here to put in a crop, if they are to harvest one; therefore, it is settled that less than the usual area will be planted, resulting from the above cause. It is said, and doubtless with truth, that throughout the rebel States the crop was a very large one, and will go far towards, if not abundant to supply them the present year, at the same time an immense army is gathered on their borders ready to march on to them, and at that season of the year when they are making provision for the season's crop, this if carried out, will arrest to a great extent the planting in those States along the Atlantic, as well as in Tennessee, Arkansas and Texas. The crops in Virginia, Kentucky and Missouri for the past year have been destroyed, and the country laid waste, and it is not probable that during the coming season that these States will any more than supply the home demand, if they do even that, for the season of planting is too near at hand to make arrangements for this purpose. It cannot be otherwise than that the field of strife must soon be transferred to the States south, which must, of necessity, to a great

extent, not only arrest the spring planting, but permit no small amount of last year's crop to be destroyed. We will suppose that the war will end with the close of the current year, leaving the result, whatever that may be politically, out of the question. The condition of the three border States named, and the rebel States, cannot be otherwise than in want of large amounts of food. This will not only increase the demand on us, but withdrawing from the northern line of transportation now gorged with freight, will reduce the price of transportation to the seaboard, which will be so much added to the price, and cannot fail of making the market satisfactory for all of our leading staples. If this view is correct, we need have no fears of a fall in the price of grain, even should the crop of 1860 be repeated. Should the war continue beyond the current year, it would result in disorganizing the whole productive population of the South, and of necessity producing a want of food that could only be supplied from the North. In such an event, it might be said that the South would have nothing to purchase with, but the emigration from the North would carry with it South both energy and money to reorganize the business destroyed by the war.

It is an old adage, that it is an ill wind that blows no one good. In this case, however disastrous this war may prove, it will bear the lightest hand on this State, for it will furnish a ready market for our labor and farm products. We therefore urge our farmers to put in as full a crop as the labor at their command will warrant, but they should be careful not to sow or plant more than can be thoroughly attended to; remember that it is the number of bushels of grain wanted, rather than the number of acres run over, half tilled, and dignified with the name of farming. As we have shown that all the great staples will be wanted, and that at better prices, it will be proper to reason together in regard to the most profitable crops.



## SPRING WHEAT, ETC.

Extensive preparations have been made in the north part of the State to sow this grain, and as it has become the cheap food for the million, there is no danger of the price going below the cost of culture, provided always that it is sown early; remember that spring wheat is but the forcing of the biennial winter wheat to become an annual, and as it must have a period of rest, however short, it must feel the effects of the sharp frost of early spring, therefore, sow early, if you sow in the mud, never wait to have the ground settle, but go to work as soon as the frost begins to yield up the surface for the action of the harrow. Oats, corn potatoes and flax will do well to fill up the time left vacant after the other farm work. Corn, rye and barley must cease to attract so much attention as formerly. Though ale and lager beer have become national drinks, yet we have more than a suspicion that the chemist has lessened the distinction between the good and poor barley, and between barley, Indian corn, and other grains for malt. This being the case, barley, as the market now proves, is attracting less and less attention, while from the demand for malt liquors it should be the reverse. In this connection we do not charge the brewers with drugging their products, so as to dispense with the use of malt, but by new processes, substitute other grains and inferior barley for malt.

## THE DAIRY.

During the past year the products of the dairy have been much depressed, with the exception of a small portion of our cheese daires which have tried the experiment of making *Hamburg* and *Western Reserve* cheese. Out of several samples that we have seen in the Chicago market, and sent south with these brands, none of them have fallen below the eastern standard, even in the county of Champaign, which is supposed not to be so well adapted to cheese making

as the more northern counties. The samples of *Western Reserve* that have fallen under our notice have come up to the standard, and we see no reason why the counties in Central Illinois having the dark colored clay loams will not prove good cheese-making districts. A large portion of the *silt* that forms the soil is evidently from granite regions producing nearly soft water. Certainly experiments thus far go to establish this point, and if found certain in its results will add to the value of that part of the State, and the cows now used to run with their calves, with only the view of growing stock can be at once put into the dairy.

## TOBACCO.

The growing of Connecticut seed leaf tobacco should arrest the attention of farmers, both in the north and south part of the State. The present and prospective high price of the weed should be sufficient to stimulate inquiry. Hundreds of hogsheads of tobacco are grown in the timber lands of the river counties, and sold at a large profit, and we see no reason why the deep, loamy soil of the prairie would not prove desirable for certain kinds. It is probable that there is no crop that so rapidly deteriorates the soil as that of tobacco, it is, therefore, best if we grow it at all, to do so while it commands a high price. It will be some years before Virginia, Kentucky and Missouri can resume their full crops of tobacco; in the meantime, let our farmers take a hand in it.

## CORN.

This grain will always continue a favorite crop in this State, as millions of bushels are required annually for domestic use. Outside of this, no small amount will be required for starch, as it makes a starch superior to that of the potato, and cheaper than from wheat. Nearly all of the potato starch factories at the east have been given up, and the business ruined. The best po-



tatoes would make only an average of nine pounds of starch to the bushel, which at three cents the pound, would be only twenty-seven cents, leaving little for the manufacturer. Kiln drying corn for the European market is to have a trial on a large scale on the opening of navigation, and should it prove successful, will again make corn one of the shipping staples of the State not even second to wheat.

#### COTTON.

In the south part of the State cotton culture has become the general topic in farm circles, and if seed can be procured in time, a large breadth will be planted. The Port Royal, or sea island seed will not be used, none but the Tennessee and Arkansas upland, and NATIVE will be planted. It will be useless for speculators to attempt to palm off southern seed, as all parties here are aware of its worthlessness in this climate.

Another feature in cotton culture which has been thus far overlooked, is the value of the seed for oil and oil cake. In St. Louis, the manufacturers have been in the habit of paying a good price for the clean seed for this purpose. It is estimated that an acre of good cotton will yield, say nine to twelve hundred pounds of seed cotton, leaving four to eight hundred pounds of seed to the acre. This will make some eight to twelve gallons of oil, worth five to eight dollars, after deducting the cost of making above the value of the oil cake. There can be no question that cotton culture is to completely revolutionize the south half of our State, and for some years at least to come, to give it a prominence over the north. School houses, so long needed in that section, will soon be among the things that are.

#### A SHORT LOOK AHEAD.

Whatever may be the result of this war, the State of Illinois will be the gainer. It is true that we shall lose many of our most valuable citizens, but their place will soon be filled by others; we shall have a large

tax to pay, but as we shall have abundance to do it with, none but speculators will feel its bad effects. Our railroads must do the carrying trade for the States, both east and west of us. We shall feed the armies during the war, and after peace once more resumes her sway, the border States must draw on us for food, for horses, for mules, for seed and for agricultural implements, while we shall in the meantime have fully established the growing of cotton, tobacco, flax, sugar and other products to be added to the other staples of the State. Emigration is beginning to pour in, and during the past three months more lands have been sold for actual settlement and new farms opened than during the nine months preceding. Illinois will not long remain the fourth State in the Union.

MRS. PARTINGTON ON PICKETS. — "As for sleeping on a picket," said Mrs. Partington to the three months' volunteer who had dropped in to see her, "I don't see how they can do it without hurting 'em. Sleeping on a post would be a great deal more sensible, unless there's a nail in it which might be prejudicious for the uniform. Every one to his taste, and such things as where a man shall sleep is at his own auction; but nobody can help thinking that either a picket or post is a very uncomfortable place to sleep on. At any rate, there isn't much room for more than one in a bed, and—." The three months' man interposed to tell her the nature of pickets and posts, in military parlance, to which she listened very attentively, while Ike was trying experiments in Prestidigitation by essaying to rub the cat and the soldier's little brown dog into one.

A gentleman who has recently made his way from Memphis, and whose character is such that his statements are considered trustworthy, states to the *Cincinnati Commercial* that United States Treasury notes command thirty per cent. premium in the "Southern Confederacy." They are rated equivalent to gold, and much sought after.

A young lady at Niagara was heard to exclaim, "What an elegant trimming that rainbow would make for a white lace overdress."

—We should enjoy our fortunes as we do our health—enjoy it when good, be patient when it is bad, and never apply violent remedies except in an extreme necessity.

### Woman's Rights and Washing Day.

Within the past few years great progress has been made in labor-saving implements for the farm, in all departments of rural economy, from a *bean sorter* to a steam thresher, while the patient wife has had to plod on almost in the old beaten paths; it is true that a large amount of genius has been employed in decorating the more fashionable part of our lady friends; and in this regard they have had all the necessary attention. While the ornamental part of a lady's wardrobe and the general trappings of her toilet have been pretty fully up to the standard of invention, yet in the useful departments of her household duties she has been sadly neglected. The sewing machine was a bright spot in her life of toil, but not half of the credit of this great invention is to be charged to woman, for the main stimulus was given by the tailors—not out of any good will, it is true, to their lady customers—but resulting in depriving them of a large amount of labor, though it must be confessed at a poor paying rate, just enough to keep them out of better employ. The sewing machine was sent out to the world and while it deprived thousands of busy needles of work in the large towns, yet it was to the wife of the farmer a labor-saving boon such as had never before crossed her threshold. The tinners and stove makers have made no inconsiderable progress, but we must confess that the farmers have not been as ready to avail themselves of these for the lessening of household duties as they do to avail themselves of the last improvements in farm implements. This is perhaps one reason why genius could not afford to while away his time on articles of household use, when the husband of the plodding wife was but too willing to let her plod on. But even across this broad stretch of wifely wrongs we catch an occasional gleam, and genius, in spite of himself, will now and then grant a boon that the million will be all the better for. The latest in this department is one that robs the

washing day of many of its terrors and will take another wrinkle from the brow of a washing day scowl and illuminate it with a smile that shall give to the impromptu dinner a zest before unknown. This new candidate for public favor is called PUTNAM'S CLOTHES WRINGER. We believe they are made at Cleveland, Ohio; Mr. James Frisbie is the agent for sale of territory and machines at Springfield, but we presume they will soon be for sale in all the large and small towns of the State. The clothes are passed through India rubber rollers that press out the water at one passage through, much more effectually than it can be done by hand. Any child of a dozen years can do the wringing for the largest family washing in a few minutes.—The clothes are ready for starching directly from the wringer. In the process no buttons are broken, hooks and eyes are not disturbed and the fabric is not strained in twisting, as by hand, for it is simply run through the rollers and the water pressed out—a saving of labor, of fabric, and of back and arm aches, for it is well known that the wringing is the most laborious part of the washing, and on an average of at least one-third of the labor; added to this is the better condition of the clothes, as the dirty water is expelled from the whole surface instead of having it forced through the fabric, which retains the dirt and allows the water to run out. The machine has had a fair trial in our family and unanimously pronounced a most valuable assistant, saving at least one-third of the labor of washing day and leaving the goods in better condition than can be done by hand, and ready for starching without further drying. As the cost is only \$5, no family, however small, can afford to do without one. It is one of those things by which “you get your money back,” as the news boys say. We will suppose that a washing is worth thirty-seven and a half cents only, one-third of this for forty washings is just \$5, the cost of the machine, when you have your money back

n full and the machine on hand. We have not been writing this for the manufacturer of the machine, for he needs none of our aid, but for the patient wife who is pressed with care, and cannot at pleasure call to her aid the washer-woman who forms so important a part of the city population. If one thing is needed more than another it is something to ameliorate the severity of the washing day. The wringer is one step in the right direction, and we need further aid in the washing part.

Patent washing machines by the hundred, with recipes of washing made easy by fluids that saved little of labor, while the fabrics were badly damaged by them, the buttons broken and the patience of the washer exhausted. The genius that has dabbled in washing machines and fluids thus far was but an arrant pretender, and it is time that he was nailed to the wall as bogus. But through the suds we can discover a faint glimmer that at no distant day will rob washing day of half its dark clouds, and thus give to the industrious wife of the farmer a brighter future.

The right that we claim for woman is that inventive genius shall give to her department a proportionate share of his labors, and that the *lords* of creation shall foot the bills without grumbling.

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**SAND, SOAP AND GLASS.**—The difference between chemistry and mechanics can be very clearly explained by the changes produced on sand. Thus, if we take a piece of quartz and reduce it to powder, it becomes sand. This is simply a mechanical change, the sand remaining of the same nature as it was prior to being reduced to dust. Silica is the chemical name for quartz, and it is one of the most refractory substances known. It is perfectly insoluble in water, and neither sulphuric, hydrochloric nor nitric acid will dissolve it. It is also so infusible that it can not be melted by any heat obtained by the blow-pipe; and yet this substance, so hard, so infusible and insoluble, can readily be converted into soap, and made to melt like wax, through the subtle agencies of chemistry. By taking some sand and mixing with it a portion of caustic soda—carbonate of soda and lime—and submitting these substances to a very high heat in melting pots placed in a furnace, it fuses and becomes glass. In its molten state it is blown into bot-

tles and vessels of every variety of form, and is also converted into sheets for window panes, and molded like clay for many other purposes.

Glass contains just a sufficient quantity of alkali to render it fusible, but not soluble, as neither water nor the three acids named, dissolve it—indeed, glass is the substance commonly used for containing those very corrosive acids, and for this purpose it is of inestimable value to the arts. The change produced by the soda on silica is a chemical one. The molding of glass when fused so as to change its form, is a mechanical principle; the action of the soda upon the silica, in conjunction with the high heat in the furnace, whereby the silica is made fusible, is a chemical one, and the compound thus formed, which we call glass, is a silicate of soda. A still more wonderful change than this is effected, if an excess of caustic alkali is combined with the silica, as it then forms what is called “soluble glass,” a substance which will dissolve by being boiled in water. Soluble glass, (silicate of soda) is best formed by boiling finely subdivided sand in a very caustic lye under steam pressure, so as to subject the silica to the highest possible temperature, as this tends to form more concentrated solutions of the silica. This is also a chemical change. The hard silica, formerly so insoluble, unites with the excess of alkali, and really becomes a soap, which is now used in Prussia and some other places for washing purposes. The silica takes the place of tallow, oil and grease, which are used for making common soap, and uniting with the alkali, it becomes soluble in water, and may be used for washing an inferior saponaceous compound. Such are some of the mysteries of chemistry.

Silica is one of the most common and useful substances in nature. It is the constituent of many rocks, and composes most of the pebbles in gravel beds. Rock crystal is pure transparent quartz, and its name is derived from “krystallos,” a Greek word signifying ice. Silica is the base of a great number of precious stones, such as the carnelian and sardonyx, which are bright red; also the opal, etc. We are entirely dependent upon silica for our present advanced position in some of the arts. It forms the lenses of the telescopes by which such advances have been made in astronomy, and from it the lenses are made for our most improved system of light house illumination.

Spectacles, those aids to the aged, are also formed of it, also our window and looking glasses; in short, silica is applied to numberless purposes in all the philosophical, useful and elegant arts. The “little grains of sand” have become mighty agents in the hands of cultivated man. It is said, however, that the ancients were acquainted with the art of making malleable glass—an art which, if it ever existed, can be re-discovered.—*Scientific American.*

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—A little nine year old girl, the other day, observing a discussion among a parcel of ladies about cooking steak—some advocating broiling beef and others frying mutton—inquired: “Aunt Kit, how do they cook sweepsteaks?”

[For the Illinois Farmer.]

## Culture of the Sorghum and its Manufacture into Sirup.

ED. FARMER:—Having been requested to furnish you a statement of my process of cultivating the sorghum plant, I comply with pleasure. In the first place, to secure a good crop of cane, I am particular in selecting seed, and I find the best mode is to go through the standing cane and select the largest and best ripened heads, and hang them till dry in some shady place. This process insures a good article of seed, and also tends to give an earlier maturity to the cane. When planting time comes on, select a piece of dry land with a sunny exposure in preference. Subsoil the ground as deeply as possible—if any clods remain, harrow it thoroughly, lay off in rows, each about three and a half feet apart, (I lay off three rows at a time with what is usually termed a corn marker), drop eight or ten seed in each hill, cover with a two horse harrow. The seed in this latitude should be put in the ground as early as possible in the spring, say the 10th of April, or sooner if the ground be in proper order—the sooner the cane is planted and started, the better. There is no danger of the seed rotting if the ground selected be dry. By thus planting early the cane ripens much sooner, is much heavier, and of a superior quality. As soon as the cane makes its appearance, run a one-horse cultivator through it so as to prevent weeds and grass from hiding it. As it gets large enough to see it in the rows both ways, use a one-horse plow with the bar next to the cane. When you get over it in this way, take a cultivator and level down the ridge made by plowing; then turn cross ways with the cultivator. After this use the plow, and do not be afraid of plowing too deep, but do not hill it up too much—it needs the hot rays of the sun about its roots. If any weeds or grass should get in the hills, they must come out, and the sooner the better. Cane raised in the weeds and grass is scarcely worth making up; cane kept entirely free from weeds and grass will yield fifty per cent. more sirup than that which is just planted and and let go at the mercy of Providence. Providence generally has but little mercy on such cane, and less on such cane growers. Cane planted at the time above mentioned will be ready for crushing by the 20th of August. As soon as the top part of the cane heads turn black, commence stripping the blades off; crowd the blades in between the stalks near the ground;

let them cure about two days, then bind them in bundles and stack or put them under shelter. This is much better food for horses than hay. Cut the heads off the cane while standing, then throw in piles till cured, then put them under shelter; this is worth as much for stock as a crop of oats on the same ground would be. Cut the cane close to the ground, and haul it to the mill immediately. If the weather be warm in the latter part of the season, before frost comes, it may be cut and piled in a shed for two or three weeks without spoiling, but if the weather be hot, it should be made into sirup the same day on which it is cut. Cane will grow on the same ground year after year without any perceptible diminution in quantity or quality. I have raised two crops of volunteer cane the finest I ever saw. The cane came up as thick as wheat over the ground. I took a plow and plowed all up excepting rows, which I left four feet apart one way, tended as usual, thinned down to the proper quantity, manufactured it in August, and made a very superior quality of sirup of it. I use, in crushing cane, a large four-horse, three-roller cast iron mill—the rollers are horizontal; I wouldn't have upright rollers as a gracious gift, and be compelled to use them. To my mill I have attached the horse power of a thrashing machine, which turns the mill by the use of a large tumbling shaft. With this mill I crush out a thousand gallons of juice per day with all ease, and more if necessary.

Taking one day with another, we averaged about seven hundred and fifty gallons of juice. This we evaporate down to seventy-five gallons of sirup; hence, we consider seventy-five gallons per day our average work, (that is, by daylight.) We arose one night, for the sake of experiment; at about half-past 12, started the mill and pans to work, and at sun down we had made one hundred and thirty-five gallons of superior sirup, such as no blunderer can make.

In making up the juice, that is, evaporating it into sirup, I use two of Cook's justly celebrated evaporators, made by Blymers, Bates & Day, of Ohio; I use Nos. 2 and 3; let the juice first on to No. 3, under which I have an intense fire. This tremendous heat causes the juice instantly to flash into foam, (the hotter you get this evaporator the better); skim the scum off as fast as it rises. The juice by this time is as clean and pure as water. Keep a constant stream of this pouring on No. 2, under which have a moderate fire; let the sirup thus made pass off into a cooler. I use a number of coolers, and let the sirup go

entirely cold, then skim off every particle of scum. It will not do to barrel the sirup before it gets cold, for the reason that a heavy scum will rise on the top of the barrel and cause fermentation. It must get cold and be thoroughly skimmed before barreling. I intend this year to have a large vat made about one foot deep, capable of holding two or three hundred gallons. In this I will put the sirup to cool. With this and the coolers I have on hand, I shall be able to let the sirup get entirely cool before barreling. This year I was forced sometimes to barrel before the sirup got entirely cold, the bad effects of which I saw in every instance.

I have made this year two thousand six hundred gallons of sirup, and if I had known the season would have been so favorable, could have made much more. I sell this year at forty cents by the barrel, and fifty cents by the keg. I have made very fair sales so far, considering the hardness of the times. I think I shall have my entire stock sold by spring.

There is one thing which has somewhat operated against me this year, and that is, a great many have undertaken to make a little sirup in pots, kettles, &c., for themselves. This kind of work rather injures the market, and is of no advantage to the maker whatever.

In conclusion, I may say, notwithstanding the scepticism of unbelieving souls, the sorghum business has proved an entire success, and I confidently predict that in five years from this time southern molasses in this community will be numbered among the things that were. I have not experimented as much as I intended to have done in sugar making, but I am convinced that before many years our own sugar from the sorghum will be one of the common articles of trade.

Yours, &c.,

B. F. W. STRIBLING.

*Virginia, Cass co., Ill. Dec. 14, 1861.*

—Mr. Stribling recommends an early day for planting, and we think he intended to say the 10th of May instead of April, for the 20th of April is very early for corn planting in Cass county. Our experience is, that it is of little use to plant before the soil begins to get warm, say May 5th to 20th. We would then plant shallow and roll the ground so as to press the moist earth on to the seed, as it is well known that the seed requires considerable soaking, and many persons recommend soaking in warm water one or two days before planting. Among the

specimens of sirup at the rooms of the State Agricultural Society at Springfield, were several very fine specimens made on Cook's evaporator, and certainly the best sample of sugar came from the same source.

ED.

[For the Illinois Farmer.]

### Fruit Trees.

ED. FARMER:—I have read with interest the jotting down of your observations, experience and facts elicited on fruit culture on your recent tour as one of the farm committee. It is just the information we farmers need, it is really the experience of fourteen or fifteen years of amateur culture boiled down to a most easily understood consistency, and worth to-day, to the farmers of the West, one million of dollars, for we were all going it blind, as it were, with bad trees, badly selected, together with the army of insects, borers, curculio, &c., and if any good fruit was obtained, it was at the expense of continual vigilance, and by not knowing what varieties to select, we have freely thrown away our money, and many of us ten or twelve years' watching and hoping, which can never be brought back to us. I have suffered enough for one man.

I have a piece of ground well prepared for a small fruit garden, to be planted next spring, and among other trees, I had proposed to myself to plant one hundred dwarf apple. Now, then, you have knocked all my hopes into a *cocked hat*, although you at the same time tell us that the fools are not all dead yet.

Now, sir, one other thing, the plat of ground aforesaid is white oak land, and never had but one crop taken from it, and that potatoes. It is protected on the northwest and south by a second growth of timber from fifty to sixty feet high, quite dense on the north and west, moderately so on the south, and open on the east, with a slight eastern exposure.

If I understand you correctly, you would not wholly condemn such a location for dwarf apples. I would be pleased, if convenient, for you to write me and say yes or no.

By-the-by, those long rows of dwarf apples in your nursery, how much for half a hundred or so.

Yours, &c.,

S. WOOD.

—According to the description of the soil, aspect and shelter, you have a most excellent location for an apple orchard, and if dwarf apples will do well in any part of Central Illinois, they should



in your location. But we should not like to throw away such a good site for fruit on the dwarf apple, how muchsoever we might wish to sell out our stock of dwarf trees. If you wish to cultivate dwarfs, take standard trees two or three years old, with heads near the ground, treat them as dwarfs, set twelve feet apart each way, and when they grow too thick, cut out the poorest. By planting a portion of early bearers, such as Keswick's Codlin, Early Pennock, Holland Pippin, Yellow Ingestree, Scow and Stannard, you will have a good supply of fruit in three or four years.

Of course, you would want Bellflowers, Rawle's Janet, White Pippins, etc., to complete your list, with a few standard pears, of such varieties as the Bartlett, White Doyenne, Madeline, Osband's Summer, Steven's Genessee, Flemish Beauty, and Louise Bonne de Jersey, with a row of the May cherry for a border.

We are pleased to see the labors of the farm committee so well appreciated, especially in the number of valuable facts that they gathered in their progress through the State. Ed.

### Plowing by Steam.

The attempt to plow by steam on the prairie is again to be essayed. In this case an English apparatus is to be used. Jonathan has run the thing into the ground, and left it in disgust, but John Bull, nothing daunted, is to give it another trial. "Fowler's Patent Steam Plowing and Cultivating Machinery" is to be sent to Champaign county on the opening of spring, and to be set to work in prairie breaking.

There are to be no premiums, simply a committee of the State Agricultural Society to examine and report on its value. Of course, we shall be a committee of one on the part of the press, to report to the power behind the throne the doings of his plowship.

This plow is in charge of Mr. Robert Eddison, who does not claim that it will compete with teams in light work, but is unrivaled in prairie breaking and in all cases of deep tillage, where extra power is required. He says: "Few, even among practical farmers, are aware of the advantages of deep cultivation. By stirring up the soil at a lower level, the influence of the atmosphere penetrates further, and the drainage is better effected. The roots of the crops develop themselves in their natural direction, and are able to reach a depth where they find moisture in the driest seasons. By deep plowing, we often

expose a soil which never before saw the light, rich by natural or by the drainings of former manurings. Deep cultivation by animal power presents many difficulties; both men and horses are exhausted by it, and the better crop is purchased at a great expense of muscle. By steam power it is done with ease and certainty, and soil, unproductive under shallow cultivation, may be made profitable by burning a little extra coal."

The engine is to be stationary, drawing the plows by a wire rope that winds around a drum, and draws the plows back and forward across the field, say forty rods wide.


It is possible that this machine may prove valuable in deep plowing, say twelve to sixteen inches deep for orchard and vineyard planting, and such crops as need such deep preparation. It will have advantages over the traction engine for while it can move itself along the ha land, yet when drawing the plows it is stationary, thus making it effective on rolling land and through low places.

It is also possible that it may prove of some value in mole draining, more especially should it prove on trial the mole draining can be performed during the summer on upland, at a time when the soil is not charged with water.

We have no idea that steam can take the place of horses, in any case where three horses can do the work, but in deep trenching in heavy clays, as it is in this class of soil in England that the machine has been found the most valuable.

We like the spirit in which Mr. Eddison enters on the experiment of prairie plowing with his favorite machine, he asks nothing more than an opportunity to give it a fair and impartial trial in prairie breaking, and in such deep plowing, as from the nature of our soil, would warrant the outlay. We intend to give the public a fair and impartial account of the trial, when made.

**BEAN SORTER AND CLEANER.**—Having about fifty bushels of beans, nearly pure navy, a neighbor, Mr. J. B. Phinney, sent us one of Sanford Adams' bean sorter and cleaner, made at Boston, Mass. This is composed of a series of screens, and to sum up is just the thing with which to clean up the bean crop. We shall not attempt to describe it further than to say it costs five dollars, and no person growing or dealing in beans can afford to do without it.

 A Scotch regiment, now organizing at Chicago, advertises for pipers.



[From the Chicago Tribune.]

**The May Cherry, its History so far as we know—Is it the Early Richmond? The Rural New Yorker set right.**

CHAMPAIGN, Ills., Dec. 10, 1861.

We have, from time to time since the year '55, brought to the attention of cultivators the great worth of this cherry, its hardiness, profuse bearing and easy culture. We had supposed that we had made its history and qualities pretty well understood, from the fact of its wide dissemination since that time. We claim no particular credit in the premises, having only done our duty as an agricultural writer, and our sole object now is to place the subject in its true light. In a late number of the Rural New Yorker we find an article under the head of "Western Editorial Notes," entitled the "Early May Cherry," from the pen of C. D. Bragdon, the Western editor of that valuable paper, and which we give entire:

**THE EARLY MAY CHERRY.**

"I have just received from my friend, Hon. M. L. Dunlap, his ILLINOIS FARMER for October, in which he announces to his readers that he has visited James W. Wakeman, "the owner of the large orchard of the May Cherry," etc. etc. It is the same James W. Wakeman of whom the writer wrote in his notes published in the Rural July 13th. It will be remembered that I wrote of the Early Richmond cherry—it being the one cultivated by Mr. Wakeman.

Now the cherry referred to is either the Early Richmond or it is not. Mr. Wakeman calls it the Early Richmond; Mr. Dunlap the Early May, or rather the May Cherry," which is, according to Elliott, a synonym for the Early May, which is the right name for a cherry described on page 217 of Elliott's Fruit Book. The question is, which cherry is Mr. W. Cultivating in his orchard and sending all over the country? If it is the Early Richmond, as he believes, and which the writer believes it is, according to Elliott, it ought not to be called the Early May or the May Cherry by any one; especially should it be correctly called by our venerable friend, so long identified with pomological matters in the West. If, on the other hand, Wakeman is wrong and Dunlap is right in calling it the Early May, the question ought to be established beyond a doubt, and the public taught to call it by its proper name.

"The writer believes the cherry cultivated so successfully by Mr. Wakeman, and his neighbor, Mr. Case, to be the Early Richmond, without the shadow of a doubt; and he does not believe the Early Richmond and the Early May identical, by any manner of means; therefore he believes his friend Dunlap unmistakably wrong in calling Mr. Wakeman's cherry anything else than the Early Richmond—and this conviction is expressed with the most profound respect for Mr. Dunlap's age, experience and wisdom.

"The writer has carefully compared the fruit grown in Wakeman's orchard with the descrip-

tion given by Elliott, several times, and believes it to be identical. Elliott calls it productive, as it is; he calls it worthy general cultivation, "indispensable to every garden," which is true; but he places the Early May in the list "unworthy of cultivation," which is the right place for it, as it has been found throughout this State by the writer.

A case in point. A few weeks since I visited Mr. Dunlap's and our mutual friend H. L. Brush, Esq., of Ottawa. We had been walking through the vineyard and orchard, when we came upon a group of cherry trees. 'There,' said he, 'are some of our friend Dunlap's Early May cherry trees!'

'Well, what do you think of them? Are they productive? and are they identical with the Early Richmond?'

'Why, you know Mr. Dunlap claims they are identical; but the Early May I got from him are worthless. They are unproductive and kill down here winters; while the Early Richmond which we get from Wakeman and Kennicott bear early, are hardy and extremely productive.'

"I repeat this conversation to show that the cherry which my friend Dunlap sold to Mr. Brush as Early May is radically unlike that obtained from Mr. Wakeman as Early Richmond. The dissimilarity, according to the testimony of Mr. B., is a very important one indeed—precisely the same, substantially, as that made by Elliott.

"The trees referred to were sold Mr. Brush some years since; doubtless Mr. Dunlap has the Early Richmond now; indeed the writer is confident he has seen it on his grounds; but if he has, and is selling it the Early May, or May cherry, he is, in my opinion, committing a serious pomological sin—and I have a great respect for his venerable self.

"It is a matter of not a little importance, this question in nomenclature, and ought to be settled. Will my friend D. aid in doing it?"

REMARKS.—We have never positively asserted that it was not the identical Early Richmond, though we believe that it is not that, but a sub-variety closely resembling it in both fruit and tree; this your readers will recall to mind.

We have before said that the May cherry has for many years, been known in Kentucky, Ohio, and Indiana, that the first trees introduced into Northern Illinois were brought from Ohio or Indiana, by Mr. Brunson, to the vicinity of Lockport, Will county, about the year 1850. Mr. Jas. W. Wakeman, of Cottage Hill, procured trees or cions of Mr. Brunson. These trees, coming into bearing, with their abundant crops of fine fruit, attracted the attention of the writer, and in the spring of 1855 we procured several hundred trees of Mr. Wakeman, most of which were sent out to our customers from the nursery at Leyden, and which we believe to be the first general dissemination of this valuable fruit in the Northwest. The trees alluded to by Mr. H. L. Brush, as hav-

ing been sent him as the May cherry by us, and which proved to be worthless, were not the May cherry but the Kentish or pie cherry so common in New York. They were billed to him as 12 Kentish cherry, April 26, 1853, two years before we came into the possession of the May cherry, and before we had become satisfied of its value. Mr. B. is therefore in error in regard to receiving the May cherry of us, as he will at once see by the letter to him of that date. The Kentish, though hardy and productive in New York, is of no value here, as time has abundantly proved. The May cherry of Elliott is not the one in question, his is "a Morello, with small fruit, round, slightly flattened, lively light red, flesh, tender, juicy, acid—unworthy of cultivation." On the other hand, the May cherry under consideration is remarkably productive in Ohio and the West generally, is of medium size, skin of a light red, growing nearly black when fully ripe, and generally the stone adheres to the stem and can readily be drawn out with it. Hooper in his Western Fruit Book, says the Early May is so very like the Early Richmond that the distinction is hardly worth making. Both very productive and excellent for Cincinnati. He also says that the Early May hangs long on the trees. Until within a few years Mr. Wakeman called this cherry the Early May, after the name given him by Mr. Brunson, and for what reason he changed it to Early Richmond is best known to himself, for we do not believe that he has a tree of the Early Richmond, as known in New York, or from that source, in his grounds, or has ever seen one in bearing other than the ones produced under the name of Early May from Mr. Brunson.

It is a well known fact that most if not all the trees procured in New York called Early Richmond are dead, and have never attracted any attention. It is true that the Mazzard stock upon which they were grafted was too tender for this climate, and hence the loss of trees; nor has the much lauded Mahaleb been much more fortunate, and what is stranger still, that the Early Richmond trees to be considered genuine and productive must trace their paternity to the grounds of Mr. Wakeman, and that Early Richmond trees from New York are of no value, while the May cherry of Kentucky, Ohio, Indiana and Illinois are equally productive, valuable and identical with this Early Richmond of Wakeman. There is nothing strange in this, when we know that his trees came from the same source and not from New York. Nurserymen in those States persist in calling it the May cherry. Now, if the Early

Richmond of Downing is equally as hardy, or as Mr. Bragdon assumes, identical, why has the fact of its value not become known years before this. We have at different times purchased the Early Richmond in New York, but the trees always winter killed before they fruited, and we are free to confess that in all our journeying through the State, we have never seen an Early Richmond tree in bearing. The May cherry almost always produces fruit the second year after grafting, which is not the case, as far as we know, with the Early Richmond. We can point to two of the latter, from the nursery of Messrs. Elwanger & Barry, now three inches in diameter, that have not fruited, and these dwarfs on Mahalebstocks.

These are the points of difference that we make, that the May cherry is more drooping in its habit, bears younger, and is more productive and hardy for the prairies. That it is not the Early May of either Downing or Elliott, but the cherry well known throughout the States, named as the MAY CHERRY. As Mr. Bragdon says, it is time that the nomenclature of this fruit was set at rest, but we confess that the way to do it at the next meeting of the State Horticultural Society, on the 3d December, is not so clear. With such a close similarity of fruit, of habit, of maturity and of foliage, without having been tested side by side, we would ask who will take the responsibility of saying that they are, or are not, identical, though as we have before stated, we believe they are not the same. Yet we are not prepared for a decided vote, for we want another season to give us the opportunity of a more thorough investigation. There is one great fact in all this, let the cherry be called what it will. It is the only one thus far that gives ample testimony of hardiness and reliability of good crops on the prairie.

RURAL.

—There is no fruit that has attracted so much attention within the past two years as this cherry, and at this time we republish the above for the purpose of adding further to its history and to place all the facts in the same connection.

At the meeting of the State Horticultural Society the subject was discussed at considerable length, a synopsis of which we give below.

We made a proposition for the appointment of a committee of three, whose duty it should be to examine the subject the coming season and report upon its nomenclature with a view more especially to decide upon its identity with the Early Richmond. In the discussion various opinions were advanced as to the identity of this Western

May cherry with the Early Richmond, but no definite conclusion was arrived at, and the subject was left to the committee.

There was a sufficient number of facts set forth to show that at least most of the trees sent out from the Buffalo and Rochester nurseries as the Early Richmond are not identical with the May cherry under consideration, but that a cherry answering to Downing's description of the Early Richmond, and nearly or quite identical with the May cherry has been sent out by J. J. Thomas and some others. Messrs. Phinix, Edwards and Overman bore testimony to this fact. Mr. Edwards, who had resided some years since at Cincinnati, said that the cherry was called May cherry and Early Richmond indiscriminately, and he believed it to be the true Early Richmond of Downing, and that many trees sent out from the New York nurseries under this name were not true but an inferior variety. We think all the speakers coincided in this view.

In the first place, the committee consisted of three members, to which ourself and one or two others were added, but without any notice of a meeting of the committee, to our surprise they, or a majority of them, Mr. W. being one of the number of the original committee, made the following very astute report:

*Resolved*, That the cherry heretofore recommended by this society as the Early Richmond or the Early May is in our opinion the true Early Richmond of the books; that the true Early May is an inferior variety, unworthy of cultivation, and therefore that the name of Early May as applied to the Early Richmond having been used in deference to local Western usage, without sufficient explanation, is incorrect.

Well, truly the mountain labored, etc. Now what does this amount to? Have the committee made examination through the season of 1862 and compared the tree and fruit so as to arrive at the facts? Certainly not unless they have used some spiritual medium to investigate the subject.

We affirm that in our opinion the committee have not performed the duty imposed upon them, but in such an indefinite report have still further befogged the subject. The May cherry was well known in the west years before Downing wrote his *Fruit Trees of America*, but it appears to have escaped his notice, as no mention is made of it, though Virginia May is put down as one of the synonyms of the Kentish in common with the Early Richmond. The first edition of Downing's work was published in 1845, and the next year this cherry was brought to Will county from In-

diana, as will appear from the letter of Mr. Brunson.

No doubt that these came from Kentucky, and it is probable that it came from Virginia, as the Virginia May, hence the name May, and subsequently Early May, from its earliness. We have never contended that it was not the Kentish of Downing, but have always claimed that it was not the Early Richmond sent out from the New York nurseries. Had the committee reported facts instead of their opinion we would be content. Let us first settle what is and what is not the true Kentish of Downing and we will be at once master of the subject. That J. J. Thomas has it we are disposed to believe, and probably others.

We hope no man will purchase the May cherry under any other name without he knows it is the one that has been known in the West as such for over a generation and in this State at least since 1846. As we have before said, Mr. Wakeman purchased the variety under the name of May cherry and for several years called it such. He certainly had no right to change the name to Early Richmond, nor had the committee of which he was a member, for Downing who is the authority in nomenclature for the society, says that the Early Richmond in common with Virginia May is a synonym of the Kentish. Should this cherry prove to be the true Kentish we will cheerfully accord it the true name and be thankful that the West has preserved this fruit now conceded to be of so much value.

It is possible that our May, or Virginia May, may have been sent back from the West to Mr. Thomas and others and been baptized with one of its synonyms and returned to the West; hence the identity of these specimens. Virginia May standing as it does at the head of the list of synonyms would indicate that Mr. Downing had it in view when writing a description of it. From the fact that a large part of the fruits of Kentucky were brought with the early settlers from Virginia, it is more than probable that the Virginia May came with them also. Will Mr. Thomas and others at the East and West assist in settling this point. We conclude this long article with the letter of Mr. Brunson to the *Chicago Tribune*:

EDS. TRIBUNE—I saw in your last weekly a communication in relation to the Early May cherry, and seeing my name in connection therewith, I would throw what light on the subject I could, and which I do more cheerfully on account of the high opinion I have of that variety of fruit.

In the spring of 1846 Jacob Smith, of Putnam county, Indiana, brought some of the above mentioned variety of cherry to my father's farm, 3 miles north of Lockport, west side of the Desplaines, and grafted them on the common Morello stocks. They grew and bore well; but of the previous history of said cherry I know nothing. Mr. Smith is still living two miles west of Lockport, Ills. He is at present suffering from a severe wound from a fall, but no doubt at a proper time, would cheerfully communicate any facts he may be in possession of in relation to the previous history of said cherry. I would add that nearly sixteen years' experience in cultivating the Early May has given me a higher opinion each succeeding year of its great merits as well as superiority over every other variety for this climate. I had one tree last June, two and a half feet high, which produced four large cherries, and one tree of four inches in diameter at the ground, which produced one bushel. I would inculcate through your wide spread journal the absolute necessity of high culture for this cherry, as a moment's reflection will teach any one that such enormous crops cannot be produced otherwise.

It is customary in this region to use the Morello suckers for stocks, which in turn fill the land full of suckers again, to the great injury of the tree. These should be cut down two or three times during the summer, especially blue grass, and in fact all other grasses should be destroyed for a wide space around each tree. I forgot to mention that Mr. Smith has always called this cherry the Early May.

I remember distinctly the circumstance of Mr. Wakeman's procuring the Early May at my father's place, as he represented, and of initiating the jolly sharp-shooter in the mysteries of propagating the same.

Yours truly,  
O. M. BRUNSON,  
Lockport, Will county, Ills.

### "Keep Bees—Keep Bees."

The leading article in the London Mark Lane Express, of September 30, says the *Genesee Farmer*, is devoted to BEES. It states that they receive far less attention in England than they deserve—far less than in France and other European countries. France produces annually \$14,000,000 worth of honey and wax, and imports \$12,000,000 worth in addition. The Agricultural Society of France thinks \$40,000,000 might be produced annually in that country. To show the profits of intelligent bee-keeping, the Mark Lane Express relates the following anecdote:

"Some years ago a bishop was holding his first visitation of the clergy of the diocese, in a town in one of the midland counties. Among those assembled he soon discovered an old college acquaintance whom he had not seen for a great number of years, but whom he greeted with all the warmth of a renewed friendship. On com-

paring notes with his friend, the bishop learned that he was still a curate in a country village, at a stipend of one hundred pounds a year, and that he had a wife and a large family to support. The worthy curate, however, invited the bishop to spend a day with him before he left the neighborhood, and the latter, not wishing to appear proud, accepted the invitation. On reaching the parsonage, he was surprised to find his friend's wife an elegant, well dressed lady, who received him without any of the embarrassment which a paucity of means too frequently occasions in those who feel its pressure. The children, too, were all well dressed, and looked anything rather than as having suffered from the pinching pains of unappeased hunger. But the good bishop's astonishment was still greater, when he sat down to partake of a repast worthy of the traditional and customary fare of his order, and was invited to "take wine" of the purest flavor and aroma with his fair and graceful hostess. Knowing that his friend was originally a poor man, he considered that he must have received a fortune with his wife. After, therefore, the latter and the children had withdrawn, the bishop introduced the subject, by expressing a fear that his friend had gone to an unusual and injurious expense to entertain him, and that it would entail privation upon him afterwards. "Not at all," replied the curate. "I can well afford to entertain an old friend once in a while without any inconvenience." "Then," rejoined the bishop, "I must congratulate you, I suppose, on having received a fortune with your good lady." "You are wrong again, my Lord," replied the poor curate; "I had not a shilling with my wife." More mystified than ever, the bishop resumed, "Then how is it possible for you to have those comforts around you that I see, out of a hundred a year?" "Oh, my lord, as to that, I am a large manufacturer as well as a clergyman, and employ many thousands of operatives, which bring me in an excellent living. If you will walk with me to the back of the premises, I will show you them at work." He accordingly took him into the garden at the back of the house, and there was a splendid apiary, with a large number of bee-hives, the source of the curate's prosperity. The bishop never forgot the circumstance, nor did he ever fail to make use of it as an argument; for when he afterwards heard some poor curate complain of the scantiness of his income, he would cut the matter short by exclaiming, "There, there, let's have no grumbling. Keep bees, like Mr. —; keep bees, keep bees!"

—The labors that a man performs with his hands are but his out-works. Look well to the strengthening of your inner works.

### BIRTHS AND THE DAYS OF THE WEEK.

Monday's bairn is fair of face;  
Tuesday's bairn is fu' o' grace;  
Wednesday's bairn's the child of woe;  
Thursday's bairn has farto go;  
Friday's bairn is loving and giving;  
Saturday's bairn works hard for his living;  
But the child that's born on the Sabbath day  
Is lucky, and bonny, and wise, and gay.

## Should Farmers Study Law or Invest in Law Books?

To a certain extent, we answer in the affirmative. Of late several very vexatious and expensive law suits between farmers, and between farmers and others, have come to our notice, and upon which we deem it our duty to have a word to say.

For several years we have been an acting justice of the peace, and thus have had an opportunity to know something of the subject. Farmers should know enough of law to keep out of its meshes. They should also know something of its forms, so as to defend themselves in case they are compelled to take a part as parties to a suit, or as witnesses. Law books are very expensive, the statutes costing alone the sum of twelve dollars, which, with four dollars for session laws passed since their publication, makes sixteen dollars, but as there are so many apparent contradictions of statutes and decisions of the common law, which form so important a part of our code, that even this would be of no great value to him, and as a general thing we would not advise either their purchase or their particular study. "Haines' Treatise," a work designed for the use of justices of the peace, embraces all the forms of pleading, and all of subjects coming before a justice's court, is invaluable, and, in thousands of instances, would save vexatious suits and accruing costs. As the most of suits of farmers have their origin before justices of the peace, it is proper that farmers, to a certain extent, should become familiar with the subject matter of this court, and what the rights of litigants are.

This work, we believe, is ample to give one all the necessary law and law forms needed before a justice, and cannot fail of being valuable. We have learned to prize the work highly for the great number of cases that it has *quashed* by allowing parties to read its pages, when their rights were made plain, and they either abandoned their intended suits, or were induced to settle the case, thus saving many a neighborhood broil. The cost of the work is five dollars. It contains a set of forms for all business purposes; gives a list of decisions relating to this important court; a complete and concise digest of evidence, forms, and regulations in regard to patents, Constitution of this State and of the United States, in short, it is a complete *vade mecum* for the farmer, trader and mechanic, and we hesitate not to say that it should be found in the library of every

farmer who has extensive dealings, or is threatened with petty suits. In almost every town we meet with some person who knows too much law, that is, too much in contrast with his integrity, and such men depend upon the ignorance of their neighbors to wring from them some advantage.

Between ignorant justices and shyster attorneys, the farmer stands but a poor chance of justice, and hence the adage that "it is uncertain as the decision of a backwoods justice."

To expect that a common farmer, without any particular knowledge of law or law forms, could, upon receiving a commission from the Governor, make correct decisions at once, is at least absurd, for there is no branch of business that does not require some little study and attention. As a general rule, our village attorneys at once advise their clients to commence a suit, let their grievance be what it may, something upon the plan of the doctor who doctored his patients into fits, as he was "death on fits." It is to save the farmer from the needy grasp of the village pettifogging lawyer that we recommend this work, which is so reliable and complete in itself for almost all the legal and business departments required by the farmer.

With the author, Hon. E. M. Haines, we have had a long acquaintance, dating back to the village of Chicago with its few thousand inhabitants and muddy streets, but now the commercial metropolis of several powerful States lying together in the great valley of the lakes and the upper Mississippi.

A farmer needing legal advice had much better invest in such a work than to employ some tenth rate lawyer, as is too often the case. In the opening of a highway we have seen a suit commence in chancery when almost any school boy would have known better, but the attorney must have the fifteen dollars, even when he knows his client would have the costs to pay, for the simple fact that suits of that nature can only be tried in law courts.

We could give a long chapter of similar swindles that would not be to the credit or talents of these leeches on the producing class. The honorable, high minded attorney we hold in high esteem, while we would send the needy pettifogging lawyer to some other business more useful, if not so ornamental; and it is with shame that we confess that a large share of their ill gotten gains are drawn from the too confiding farmer. Farmers should be sufficiently intelligent to make out their own leases, contracts, notes, bills, &c.,



and with the aid of such a work, they can easily do it.

The work is sold by E. B. Myres, 111 Lake street Chicago.

### Annual Meeting of the State Horticultural Society.

In our last number we had written up the proceedings of the third day, and now resume. In our last several typographical errors occurred. The President is O. B. Galusha, of Lisbon, Kendall county; K. H. Fell, of Bloomington, is the Vice-President of 8th district; G. H. Baker is from Union instead of Marion county.

In the discussion of apples for Northern Illinois, the writer of this stated that he had fruited in his orchard at Leyden, Cook county, over two hundred varieties, and that out of this large number only the following varieties had borne good crops the past season, and that only a part of these he considered good market sorts:

Twenty Ounce, *Late Golden Sweet*, *Holland Pippin*, *Milam*, *Winter Bough*, *Red Gilliflower*, *Stannard*, *Winesap*, *Early Harvest*, *Summer Queen*, *Early Pennock*, *Belmont*, *Keswick's Codlin*, *Snow*, *Tewksbury Winter Blush*, *Ramsdell's Sweet*, *Jonathan*, *Flushing Spitzenburgh*, and *Pound Sweet*.

This is a large cutting down of the list, and even these must have a further thinning. Those in italics are only such as have proved at all profitable for market, and the other may be mainly dispensed with. Of these, four are sweet apples, all productive, but as the demand for sweet apples is limited, they should not be planted on a large scale. The *Late Golden Sweet* is one of the best autumn sweet apples for the table. *Pound Sweet* is Lyman's Pumpkin Sweet.

Were we to select for a market orchard from these, say fifty trees and over of each variety, *Holland Pippin*, *Stannard*, *Winesap*, *Summer Queen*, *Early Pennock*, *Keswick's Codlin*, *Snow*, *Flushing Spitzenburgh* and *Jonathan*, would only find a place in it. Of course some of the others are profitable to a certain extent, and could not be dispensed with.

#### GRAPES AND GRAPE CULTURE.

One of the most interesting and valuable discourses on the above subjects.

#### THE DELAWARE.

We copy the proceedings as published, correcting and adding to them from our own.

Mr. Dunlap—I have seen the Delaware this year in many localities. It grows variously as to strength. Have had it myself four years, and from two sources, Rochester and Columbus O. It grows poorly with me. There can be no question that soil has a powerful effect on it, as I have observed that on all light colored soils, like those of Adams county, it does well, while on the darker loams in the central and north part of the State it is less vigorous. In Champaign county, unless we discover some new mode of culture, it will prove of no value. Stewart, of Quincy, who makes these grapes a speciality, has the best I have seen. Would recommend this variety for special soils. In the grounds of Mr. Merrick in Quincy, I have seen shoots fifteen feet long.

Kidder—I have seen them grow twelve or fourteen feet in one year.

[Mr. K. is at Evanston, on a sandy soil, but we did not understand him to say that these vines were upon his own grounds, but at Pittsburg and Cincinnati, thus agreeing with Dr. Hoy, that at Racine, on the lake shore, it was not especially vigorous.]

Baldwin—I think the Delaware is a capricious grower. I had a vine of Dr. Grant a year ago last spring; it grew eighteen inches last year, and twenty four this, but a graft cut off grew five feet, lived through the winter, and this year grew ten feet, and gave me as many layers; the old vine has done nothing; I live in south part of LaSalle county.

Nash—In the spring of 1858, I bought a vine said to be the Delaware, in Connecticut. I prepared the ground as I do for others by trenching two and a half feet deep, I have nursed it carefully since and have got it up eighteen inches. In 1859, I bought one not so good looking of Mr. Phoenix, which grew six feet last year. I cut it back to two eye; this year it bore five bunches, and grew canes of ten or twelve feet.

Thompson—The grape is everywhere allowed to bear too early; it is a rich feeder.

Wiley—Is not feebleness of the vines owing to excessive propagation?

Bragdon—I visited Mr. Brush, of Ottawa, who wanted no stronger growth than these made, when properly propagated.

[Mr. Brush is on the bluffs at Ottawa, a strong limestone soil of heavy clay, well adapted to the grape.]

Overman—What amount of deterioration does layering from fruit bearing vines produce?

President—The deterioration is in proportion to the amount of layering; the old vine must not be neglected.

Phoenix—Dr. Grant says a grape vine can be layered to death.

Bliss—The Delaware does not make so much wood as other grapes.

President—I had a Rachel plant layered to death.

Kidder—I think grapes have not been taken



care of. A man should not set out until he is ready for it.

Minier—I have had grapes from grafts of the same year on the Catawba; my father has five dollar vines, which produce the same year, but are not so good for stock as younger vines.

Dalton, of Calumet—I had this grape some years ago from Delaware, Ohio. The old plants, although not forced, did not live well, while those from them grew finely. I think the reason that the old vines did not do well was the change of the soil, &c.

Douglas—It is a common rule among propagators to throw away the old vine after a few years.

Andrews—I put a cutting six inches long in the ground last spring, and it grew fourteen or fifteen feet; I layered it, and will get ten or twelve roots; my soil is light colored; on dark colored soil near by the river did not do so well; in fact, I think in no instance has the dark soil done well. No bones are needed in grape culture; mix up the soil well; plant on soil that will drain itself, or underdrain, if flat. In this way I raise even the Golden Chasselas, Hamburg and White Muscat out doors; it is better to starve grapes than to over feed them. For foreign grapes, I would suggest the east side of a close fence six feet high. Plant four or five feet apart, and six feet between the rows; prune in the fall; train the vine so as to slant at the root and protect it in winter; put a stone on the bent over vine to hold it down, and throw on a few shovelfuls of earth; I prune my vines so as to have two arms at right angles to the main vine, which are low enough to be included in this covering; I do not let my vines overbear; I can ripen the Catawba the first of September, in October, or not at all, by different growing and pruning; overbearing and shortening in, retard the time of ripening. The Delaware is very easily grown from cuttings, by putting two eyes below the ground; water and dig about a little way off; cut cuttings in autumn; put them on the ground and cover up with earth until used; set out in spring.

[The soil of Mr. Andrews' is on the Trenton or Galena limestone, a porous, friable stone that is easily weathered down. The garden of Mr. Rosenstiel at Freeport is also on an outcrop of this rock, and his grapes do so remarkably well that it is a matter of astonishment to every one. Why these two gentlemen should be so remarkably successful is no great secret to us. In the first place their soils, though twenty-eight miles apart, are alike, and another coincidence, they are practical grape growers, and have taken the utmost advantage of their soils. Let no one suppose that with the same care they can succeed anywhere, as these two persons have done. With similar soil others may succeed. Their practice will be found valuable on all soils.]

Douglas—In planting an old vine, I would bend it over and make it put out new roots above

the old. In layering a vine, the first layers are stronger than those succeeding.

Phoenix—I would always use *well rotted* manure.

Bragdon—Brush would indorse Dr. Andrews as to letting laterals grow. He is down on manure.

Asa Kennicott, Dr. Grant and Charles Downing told me I must use no manure; I make use however, of some well rotted muck and cow manure. Where a mixture of these and sand were used the vines started twice as well. A part of these I then planted in sand with a little leaf mold, and a part in a very rich border. The last grew well; the former not.

[The Dr. is located on the lake shore sand knolls, and needs both manure and clay.]

Phoenix—I would use manure in planting out.

Kidder—I would ask how they get crops at Rockford without manure.

Andrews—It is a light clay soil, not rich; a shell limestone soil, perhaps.

[As we said before, this lets out the secret, this outcrop of *shell lime*. It has doubtless once been the bed of Rock river, washed down to the rock, and a change of channel has allowed this rock to become weathered down to soil, forming one of the best of grape soils.

Kidder—The best vineyards in the west which I have visited, were well manured; they were not in Illinois, however.

Andrews—If our soil were heavy clay, I should mature.

The Delaware was recommended for general cultivation, by a very close vote, however. A vote that at no distant day will be rescinded, placing it among those that do well in certain locations. According to usage, no fruit is entitled to a place on the general list unless it is valuable in all parts of the district, which this grape is not, as shown both in this discussion and the vote.]

#### *Diana.*

Douglas—It has been dropped by some of our eastern friends, but I do not want to be too hasty in doing so.

President—I have it in the open air.

Starr—It is hardy at Alton.

Nash—It is hardy with the Catawba.

Overman—I had good vines of Charles Downing in 1853, good layers therefrom and very nice fruit; lost them in making new location; superior to Catawba, though smaller, and next in quality to the Delaware.

Bragdon—I have noticed that with the same treatment it is from ten days to two weeks earlier than the Catawba.

Sherman—I find it one of the best.

Phoenix—It is tough skinned; and has a peculiar flavor.

Bragdon—I have seen it tested a dozen times and put next to the Delaware.

Recommended for general cultivation.

[Here is another grave error of the Society, and one that they will repent at leisure; we refer to the same reason given above in regard to the Delaware.]

#### Concord.

Andrews—When thoroughly grown, I think it one of the best; could I have but one it would be the Diana or Concord; it is a free bearer, large, and delicious, *when well grown*.

Douglas—I prefer Concord to Diana. It is remarkably hardy with us; I have seen it in sand, gravel, clay and prairie soil; it is hardier than the Catawba or Diana, and the best we have for general cultivation; it is the best *one* grape, but has never been over propagated like the Delaware, remember.

Sanders—The Delaware is a poor grower, whilst the Concord is stronger, so that it bears propagation better; cut down the Delawares more and they would do better.

Chandler—It is a rambling but good grower, not better than the Diana, but better than the Delaware; stands without covering with us at Madison, Wis;

Kidder—I believe it is the grape for the people. It will bring twice as much as the Catawba; has a white bloom and handsome bunches; you can manure it, for it will bear stimulating; I saw vines this year two and a half years planted that produced sixteen pounds of grapes each, worth twenty cents per pound, or \$3 20 to the vine.

Asa Keanicott was opposed to pandering to the popular taste.

Sanders—Where is the poor man to buy his fruit? The grower can afford to raise cheap grapes, and the consumer to buy them.

Dunlap—I indorse Mr. Sanders; I planted a first class orchard at Leyden, in this county, and all the first class fruit is dead, while the second class varieties are doing well. I am done with all this first class fruit, suited only to the fastidious palate of some, would-be parvenu; give us good fair fruit in abundance, fruit for the million at a cheap rate. I have no objection to amateurs growing strawberries worth a dollar a quart, or grapes five dollars a pound, but these will never tickle the palate of the laborer, or be found on the table of the washer woman. Let us talk about something that is useful, and something that we can all have. The Concord is the people's grape; it grows everywhere; there is a difference of opinion on the Delaware; none on the Concord.

Kidder—The Concord grape properly ripened is very good, in the opinion of the best judges.

Ozanne—I have the Concord in fruit for three years. It ripens ten days earlier than the Isabella; its flavor is good; one in ten preferred it to Isabella; is quite hardy on the trellis all winter; bears well; I think it the grape for the people.

Sherman—It is *one* of the grapes for the peo-

ple; it is third in quality, counting Delaware as first, and Diana second; it is a strong grower and a hardy grape, but should not include the other two.

President—A fruit that may be had with common treatment.

Periam—What are the qualities for general cultivation?

Andrew—The millions can have grapes when they learn how to take care of them. The cultivation of grapes forces itself upon us because of the late bearing of large fruits and our hot summers so favorable to ripening. If one thousand Concord and one thousand Delawares were sold out indiscriminately, the former would do the most good; the Diana, too, is apt to fail in green hands, though I never knew it to blight.

Periam—The secret of grape culture is in the winter treatment; we can get along with it in the summer.

Kidder—Grapes, I think, can be grown on flat prairies; hill sides are not necessary; in Europe the hill sides are used, not because they are best, but cheapest.

Sanders—Late frosts are the chief trouble with grapes; they should be protected as late as possible; this can never be a great grape growing country,

[Probably not on the drift sands north of Chicago, but easy when on the well drained prairie, whether hill sides or not, such grapes as the Isabella, Catawba, Concord and Hartford Prolific will yet make glad the masses that give them good culture.]

Periam—Covering a vine makes it start quicker when uncovered, so that it is more liable to injury.

Bragdon—I believe grapes can be grown with good common care.

Andrews—The time of uncovering vines with me is the first week in May, without much reference to weather; I throw off the earth, let them dry, and then raise them up; we need not fail with grapes oftener than elsewhere. I have from one to two hundred per cent. greater returns from grapes than anything else in the way of fruit; I would put the roots of all fruit trees deep in the ground in Northern Illinois; the hot weather comes and cakes all the top soil, and the thinly covered roots are baked; if they survive, it is to make a full growth, and be tender enough to freeze in the coming winter; any one can find the dead roots and satisfy himself; I trench the earth three or four feet deep, and bring the surface soil to the top, and put in the tree without packing the earth around the roots; the soil around Rockford does not require underdraining.

Bragdon—Brush says he can make two hundred to three hundred dollars profit per acre.

Nash—In the spring of 1856, I found all my vines dead, and went to raising potatoes: about the 25th of April I noticed a vine lying on the ground, and covered with potato tops of the previous year, which was still living. I took the hint, and since then I lay them down in Novem-

ber and take them up about the 1st of May. Put a rock on to keep the vine down and retard the flow of sap. When I take them up, the buds have started some; if there is danger of frost, I cover them up; have had but one failure, (in 1856) in ten years.

Bragdon—Brush would not uncover before 1st to 15th of May. A dozen others give substantially the same testimony.

[It was conceded by every person present that all grape vines, even the hardy Clinton, were largely benefitted by laying down in the fall and covering up. The crop of fruit in all cases are more certain. When the renewal system is adopted, this laying down is easily effected.]

Kidder—A friend of mine keeps grapes back by covering them with corn stalks.

The Concord was added to the list for general cultivation.

The following were announced as the committees from the seven fruit districts, filled so far as possible in accordance with the resolution of yesterday :

1. Lake Shord District—Douglas, Periam and Bragdon,
2. Galena District—No one present.
- 3 Northern Illinois—Kimball, Whitney and Minkler.
4. Bloomington District—Dunlap, Overman and Phoenix.
5. Alton District—Huggins, Starr and Flagg.
6. Centralia District—No one present.
7. Jonesboro' District—No one present.

The committee on communications would report that they recommend that the reports of the Madison County Agricultural Society, and the report of the St. Louis Horticultural Society be copied and published with our proceedings.

The report was received and adopted.

[We learn that the St. Louis Horticultural Society have raised a sum of money to pay their proportion of the proceedings.

Geo. M. Beeler, of Indianapolis, was elected an honorary member.

Messrs. Overman, Wakeman, Phoenix, Dunlap and Edwards were appointed a committee to investigate the question of the identity of the Early May and the Early Richmond, and report at this meeting.

Some wine from the black currant, sent up by John A. Pettingill, of Bunker Hill, in the State of Macoupin, got uncorked somehow, about this time, and created some confusion, owing to its good quality; order being restored, the society proceeded to discuss

#### GRAPES AGAIN.

##### *Catawba.*

Nash—I have had ten years experience with it and good crops of it.

Edwards—I am satisfied with it.

Bragdon—I have found it well ripened this year north of this.

Recommended.

##### *Hartford Prolific.*

Ellsworth—I introduce it, to elicit discussion.

Edwards—I have had a few years experience with it, and like it.

Chandler—I have fruited it in Southern Wisconsin; it ripens the 10th of September; is apt to fall off when ripe; never mildews.

Andrews—I have seen it; it is thought a good deal of at Rock ord; is of good quality; I regard it as worthy of general cultivation.

So recommended.

The question of protection to grape vines being again raised, Messrs. Andrews, Dunlap and Starr were appointed a committee to bring in resolutions in regard to the protection of grapes.

Mr. Andrews, from the above committee, made the following

#### REPORT ON PROTECTION OF GRAPE VINES.

*Mr. President and Gentlemen:* Your committee to whom was referred the subject of winter protection of grape vines, having had the matter under consideration, would respectfully report that it is our opinion that all vines growing in the open air, however hardy they may be, will bear fruit of larger quality in better quantity, and with less liability to failure, by protecting them in winter, by laying them upon the ground in such manner that water will not settle and freeze around them, and covering with earth or coarse straw litter, and that this may be done conveniently, we recommend that they be fall pruned, and cultivated with reference to giving them such protection; and that the vines may be conveniently laid down closely to the ground without danger of breaking or splitting them, we suggest that they be pressed over when young in such manner that they will rise from the ground in an oblique or curvilinear, instead of a perpendicular direction.

C. N. ANDREWS.  
M. L. DUNLAP.

##### *Northern Muscadine.*

Phoenix—I move it be placed on amateur list; it ripens in October at Geneva; I thought it next to Delaware; very hardy; grapes drop.

Sherman—I have fruited this year; it is a fine red grape; place it below Concord and Diana; they all drop from the vine.

Andrews—It is being cultivated in Wisconsin, and promises well one of the best fox grapes, drops from the vines, but so do all fox grapes, even the Concord.

Willey—It is grown a good deal in Northern Illinois and Wisconsin, and is thought well of Drops from vine; is hardy.

Minier—A grape man told me mine was the finest Muscadine he ever saw; mine do not drop.

Fell—I bought two a year ago last spring; they bore about half a bushel this year; ripened first, and were about equal in quality to any I ate; drops.

Ozanne—I have had some experience with it for five years; had trouble in making mine grow; last year it bore a little, this year a good deal; drops.

Gates—I have been three years getting up a grapery in town; the first I had was Northern Muscadine; had a hundred feet row of them ripening this year; did well at first, but dropped badly as they ripened; I have given them up except a few as early grapes.

Ellsworth—It has superceded the Isabella, etc. It originated with the New Lebanon Shakers.

Recommended.

For an early grape this must be considered valuable. It is of fine flavor, a good bearer, and hardy. Of course it is not intended for a market grape on a large scale, but for an early grape at the north.

#### *White Elizabeth.*

Sherman—It is hardy without any protection at Rochester; it is nearly as compact as the Clinton, and has a fine color like Golden Chaselas.

Andrews—I think it a superior grape.

Phoenix—I have heard it is hardy in New York, and considered it worthy of trial.

Andrews—The "Gardners' Monthly" and the Grape Growers' Convention commend it. Not added.

Andrews moved that a committee of seven be appointed to test and observe different varieties of grapes, and report at our next meeting. Carried.

#### COMMITTEE.

C. N. Andrews, Rockford, Winnebago County.  
C. A. Rosenstiel, Freeport, Stephenson Co.  
Dr. H. Schröder, Bloomington, McLean Co.  
J. F. Nash, Ottawa, LaSalle Co.  
Frank Starr, Alton, Madison Co.  
T. Engleman, Mascoutah, St. Clair Co.  
Chas. Copley, South Pass, Union Co.

The foregoing is but a meager report of the grape subject, but enough to show that an abundant supply of grapes can be had in all parts of the State, with very little expense.

At this time interested parties are busy in palming off on the credulous a large number of new varieties of doubtful value. Let those who know little of grapes or grape culture, beware of the grape pedlers and get their vines of responsible parties who know what they are selling.

The following persons were appointed to pre-

pare papers for the next meeting, to be read or published:

C. N. Andrews, of Rockford—On the Grape.  
H. L. Brush, of Ottawa—On the Grape.  
Dr. P. R. Hoy, Racine, Wis.—Subject optional.  
B. D. Walsh, Rock Island—Entomology.  
Robt. Douglas, Waukegan—Pears.  
Verry Aldrich, Tiskilwa—Pears.  
C. A. Montross, Centralia—Pears.  
S. G. Minkler, Specie Grove—Apples.  
Dr. Geo. Haskell, Battle Creek, Mich.—Michigan Fruit.  
F. K. Phoenix, Bloomington—Apples.  
G. H. Baker, Cobden—Apples.  
G. W. Minier, Mackinawtown—Forest Trees.  
James E. Starr, Alton—Peaches.  
E. N. Clark, South Pass—Peaches.  
Sam'l Edwards, La Moille—Evergreens.  
C. R. Overman, Bloomington—Hedges.  
Chas. Hamilton, Henry—Gooseberries.  
H. M. Kidder, Evanston—Strawberries.  
Chas. Merritt, Battle Creek, Mich.—Blackberries.  
H. Shaw, Tremont—Strawberries.  
A. P. Crosby, Centralia—Blackberries.  
Charles Kennicott, Sandoval—Small Fruits in Egypt.  
J. T. Little, Dixon—Currants.  
C. A. Rosenstiel, Freeport—Foreign Grapes.  
M. L. Dunlap, West Urbana—Screens, etc.  
J. Asa Keunicott, Chicago—Ornamental Fruit Trees.  
James Wakeman, Cottage Hill—Cherries.  
H. M. Kidder, Evanston—Raspberries.  
C. A. Rosenstiel, Freeport—Raspberries.  
C. A. Rosenstiel, Freeport—Plums, Prunes and Cherries.  
C. T. Chase, Chicago—Beautifying our Homes.  
C. R. Overman, Bloomington—Landscape Gardening.  
Jonathan Periam, Hope—Kitchen and Market Gardening.  
Dr. J. A. Warder, of Cincinnati—Subject Optional.  
Friends from other States were invited to prepare and present papers.

#### PEAR CULTURE.

Minier—I have been trying to grow pears for the past two years, but without much encouragement. Of late has used old iron about the roots with good success.

His trees are both standard and dwarf.

Douglas—There is iron in my soil; I have tried iron, but never saw that I derived any good from it; blacksmiths' cinders, etc., enriched the soil but injured the pear stocks, and are not good for my soil; Prof Turner said, I think, in one of the past volumes of "Transactions" how well he had prepared his ground, dug deep holes and had three that put forth enormous shoots, and then the hundred trees all dwindled and died; I did the same thing myself with the same result; the pears blighted worse in hot weather after a rain; now I say dig no holes deeper than you plow; this rule is general; As regards the pear on the quince root in my land and in all Northern Illi-

nois, the graft must be planted an inch or two under ground; cut off the root if it go too deep; the surface roots must be kept alive. Leading men differ much in their treatment, owing to their different localities; Barry plants his grafts even with the surface; there is snow there nearly always during the severe cold; there came a winter without much snow and they lost their trees; Wilder plants the graft two inches under ground in order to have the tree take root from the pear; Rivers, a man that has had experience, says never to plant so as to have the pear take root; but he plants on a reclaimed swamp, and if the pear takes root it runs down into the water and so fails; Lewis F. Allen condemns all dwarf pears; he can raise good pastures, but grass is not good for pears; Cobbett at Buffalo succeeds; we see dwarf pears can be grown to take root under ground (though they do so more slowly than apples,) and thus Wilder makes his trees more permanent.

Overman—The cultivation of the pear is getting to be an all absorbing topic; for myself I have been very much troubled in getting dwarf pears by leaf blight; I succeed better by grafting the quince on a bit of apple root first; the quince lives better, and finally kills the apple root, and gets in fit condition for budding the same year.

Douglas—I have had a good deal of trouble getting quince stocks; my plan is to take up roots early for grafting, and heel them in, in dry sandy soil, covering the greater part of the leaves; in this way the leaves ripen sooner; must not be covered so as to heat, when the quince stocks remain in the nursery I head them down and throw up a furrow each side of them.

Ellsworth—I put litter (not manure) along the rows before throwing furrows against them; this keeps the ends dry; short straw or chaff is the best; peach trees may be treated the same way by covering up the buds; This makes a substitute for snow.

President—I had a perfect mat of grass in my nursery which I covered with the plow, in the way just spoken of, and the long tailed mice got in and did a good deal of mischief.

Ellsworth—The reason quince roots kill so is want of deep culture and drainage.

Dunlap—The pear fever rages, although ten years ago we had the fire blight, and this year it has appeared, somewhat, near the Mississippi, on the lime mud drift; I have made pears a special study during the last year; I think we can grow them; [Mr. Dunlap here read an abstract from a letter from Mr. Coe, of Port Byron, (page 323, of the ILLINOIS FARMER for 1861,) to the effect that the climate, not soil, was the difficulty to be overcome.] At Leyden pears protected by belts of trees have succeeded, whilst those unprotected Flemish Beauties, Buffums, etc., are all that are left of hundreds of trees; wherever I have found the pear tree sheltered, I have found pears; the soil is all right; the difficulty is only in the climate; we must grow pear trees in one climate and winter them in another; I believe pears will be raised on pear stocks; the trees are every way more durable; the only objection is they are said not to bear so soon; as a fact some bear earlier; the competition on pear orchards before the farm

committee was strong; the committee, after a careful examination of a number of orchards, concluded that the pear stock was the thing and would have awarded premiums to orchards on pear stock had it not been that the society made it a condition that the 100 trees competing should be in bearing; the three points essential in pear culture are drainage, shelter and low heads.

Starr—The summing up of this evidence is, that top protection is beneficial; the flow of sap cannot be retarded by covering the ground.

Bliss—Said he knew a tree, all of which stood in the shade of a house, except one limb, which the sun shone on; that limb was barren; the remainder of the tree blossomed.

Minier—I knew two peach trees to have corn shocks just around them, and they bloomed when all the rest in the country were killed.

Hausen—Said he had put coarse straw around every other tree in a row, and perceived no difference in the time of putting out.

Ellsworth—I have removed large pear trees with a ball of frozen earth about the roots in winter; they bloomed later, and bore when others failed; I would not, therefore, recommend to remove your trees every winter, but wish to call your attention to the fact that to get fruit, you must retard the blossoming.

#### BLACKBERRIES.

A paper, giving Mr. Ozaune's experience in the cultivation of this fruit was read:

"*The Blackberry.*—In the autumn of '54 I procured of W. Lawton, New Rochelle, one dozen (Lawton?) New Rochelle blackberry plants, set them out on a prairie soil in the latter part of October. The following summer they made a good growth; the winter of 1855-6 killed them almost entirely, so that with difficulty I found a few small roots that with care made a feeble growth in the summer of 1856; the winter of 1856-7 I partially protected them, and in the summer of 1857 I had a fine growth and a large increase of plants, which bore a few large berries in the following year, 1858; I did not keep back suckers, so that in the years 1859-60 I had a perfect thicket from my original setting-out, which bore a few berries without protection, generally small, with an occasional good sized one; in the fall of 1859, I laid down a few canes, covered with earth; these, notwithstanding the drought of 1860, bore heavily; I also set out a small plantation that spring, kept back all suckers, protected them last winter with straw, and in some instances a little earth, just enough to keep the straw from blowing off by the wind, and this year every cane was loaded to its utmost capacity with the largest kind of berries; so much so that some of the laterals broke down under the weight of the fruit; I might state that the plants were set in rows six feet apart and four in the rows, pruned in the summer of 1860 to about five feet in height, and laterals cut back this spring at least one-half; and what I consider of great importance, all suckers kept down, by cutting them off as soon as they appeared; the quantity of fruit on each bush was estimated by several who saw them to average four quarts to



the bush; I did not estimate it at over three quarts, which I know to be the fact; if picked when ripe the fruit is of good quality.

#### THE EGYPTIAN BLACKBERRY.

Two years ago last spring I procured a half dozen plants of this variety, which have borne a few berries this year about one-half the size of the New Rochelle, and about one quarter the quantity of fruit on same size canes of New Rochelle; of good flavor, I might add with protection.

#### DORCHESTER.

Bears well with me; requires protection, and is a sweeter berry; the protection of fruit about half compared to New Rochelle on same size canes.

#### NEWMAN'S THORNLESS.

Has borne good crops of good sized berries of tolerably good flavor: has the advantage that it can be laid down as easily as the raspberry, which is not the case with the New Rochelle, as those who have tried it can testify; requires protection.

*Racine, Wisconsin.*

JAS. OZANNE, JR."

Merritt—The Lawton blackberry is a favorite fruit with me; I have had an acre of plants for three years; they need protection; after the bearing shoots are cut out I and two men with spades can lay them all down in a day; I scratch and loosen the earth with a rake on the side towards which the bushes are to be laid down, and then push them over with the head of the rake; while the men throw on the earth I put on a little rough litter; bend them in any direction ['must be south here,' says Douglas.] I plant six feet apart and cultivate each way; stake them in the spring; before covering in the fall, I cut off the main stalk nearly down to where it bends over and the side branches to fifteen or eighteen inches; where there is no snow, I would cover the stalk; last spring when I got ready to plow I found I had only about half enough canes on the acre; I manured in June with a wheelbarrow load to every two hills; they were a "sight" when they blossomed; the crop was estimated at from 100 to 150 bushels; and sent them to this market; brought \$4 50 to \$5 per bushel; four stalks in a hill are enough; I sell the sprouts or cut them down; I think from 120 to 150 bushels can be raised on an acre; Some of the ground I mulched with cut corn stalks, which was an improvement; my soil is a gravelly sand with loam, sub soil gravelly and open, but not leachy; the berries were uniform in size, except in the last of the season.

Douglas—My experience corresponds with that of the last gentleman; I think they will not do well on black soil; cut off the shoots early in September and the wood will harden; I lean them to to the south to keep the sun off, and cover with old straw, etc.; plants from root cuttings are better than suckers; I wish here to add a caution in regard to plants; I got the Dorchester of Hovey; I found some of the plants had green shoots and a sweet oblong berry, while

others purple and not good; berries are better shaded.

Asa Kennicott had had the same berry from Ellwanger & Barry; it was a humbug, and they should be reprimanded.

Starr—I have grown both the Lawton and the Dorchester; the former needs no protection, but grows and leaves well; I do not like the taste, it is too acid; the Dorchester is indifferent.

Huggins—I am glad to find the Lawton has some friends; I recommend it and will show friend Starr some sweet ones at Woodburn; I mulch heavily and have deep land; I can sit in the shade of the bushes and pick them.

It was stated that native blackberries could be purchased in the season of picking at Centralia and other points below there on the I. C. R. R. at about seventy-five cents a bushel, and the difficulty in the way of shipping was the two express companies meeting at Centralia, both wishing to take all the profits of the trade, and the result was that thousands of bushels that would have been shipped rotted on the ground. The Lawton needs winter protection and cutting back in all cases; it is otherwise tender and of no value. The last season's crop was probably the best ever grown in the West. Our confidence in it is not of the sanguine description, but with good culture, shelter and winter protection good crops can be had. The fruit is very good; needs thorough ripening before picking.

#### RASPBERRIES.

*Allen.*

Asa Kennicott—It is good, but needs another variety with it to fertilize it; with the Fastloff and Brinckle's Orange on each side it bore well.

Merritt—I have had the kind six feet from another variety for three years, but no good fruit.

Asa Kennicott—I would refer to Prof. Blaney, who gave me the hint for a confirmation of my views.

Ellsworth—It is a fancy crop.

Dunlap—It is generally no crop at all; for the prairie a worthless variety, tend it as you may.

Phoenix—I have been told that cultivated in hills and kept properly thinned, it is good, but it is not with me.

Smith—Elliott says the canes must not be too thick.

Huggins—My experience corresponds with Dr. Kennicott's; I procured it of Mr. Allen, put it by the side of the red raspberry, and raised very fine fruit; removed it two years ago, and now I get no fruit; I am not so much in favor of it as I have been.

Ozanne—I had it four years in hills and in clusters with the Red Antwerp within six feet, but never had a perfect berry.

Asa Kennicott—I think there is too much desire to shove off work and fruit that requires it, on to the amateur list.

Overman—The millions will not take it.



Phoenix—Does not the Cincinnati Red work the same way if neglected? The raspberry will not bear neglect.

Edwards—With the same cultivation as the Cincinnati Red it fails.

The vote of last year recommending the ALLEN for Central Illinois was rescinded.

Mr. Overman gave an excellent exhortation upon going into the Horticultural Fair next fall with spirit. He said "we wanted at least a ton of the fadeless flowers, from a Batchelor's Button up to two tons of Evergreen sprigs and a few bales of long moss from the southern kingdom, provided the way were then open."

The matter was referred to the Executive Committee.

#### PEACH CULTURE.

Dr. Haskell—I removed to Michigan three years ago, and set out trees, which are now large enough to bear; I expect a crop next year; my soil is a sandy loam well adapted to their culture.

Merritt—I am trying the laying down of two year old peach trees; I dig a hole by the side and work under the tree and loosen its roots somewhat; then bend the tree over, and so I can gradually get over and cover with corn stalks, oak leaves or evergreen boughs, the latter being best; this will do for garden purposes.

Edwards—I am raising peach trees by dwarfing them and keeping in tubs, which I put in the cellar in winter.

Phoenix—We ought to have peaches from Maine to Minnesota, and we will; I feel it in my bones; [great applause]; the trouble is, people don't want to take trouble, and will not enjoy the duty and privilege of fruit raising.

Minier—I am satisfied that fair protection is what is needed.

Overman—The collar is attacked by the white grub, which is the worst enemy of the peach; a friend says brown paper wrapped around the collar in spring is the best preventive.

Starr—We can't protect our trees in Egypt; they grow too big; they interlock their branches at a distance of sixteen feet, and have trunks a foot in diameter; we grow corn among them the first year to shade them, and after that cultivate them without corn; trim up to a good height for convenience in fighting the curculio; have good crops three years in five; the worst enemy is the curculio, which is the same as that of the plum.

TO MAKE GOOD WINTER BUTTER.—At the annual meeting of the Jefferson county agricultural society at Watertown, on the 14th of January, a tub of superior winter-made butter was exhibited by Mr. Daniel Parker of that town, for which a premium was awarded by the discretionary committee. "The butter," says the Northern Journal, "was quite as yellow as much of the fall made sent to market, and the flavor so fine, that we obtained of Mr. Parker the mode of manufacture. He states that the milk into pans and allowed to stand until the cream is ready to be

taken off, which will depend upon the temperature of the room in which it is set. Before churning the cream must be kept in a warm room at least twelve hours; then it will require churning less than an hour. He washes his butter immediately after taking it out of the churn, and at the same time salts it. His cows had been fed on clover hay, without grain or roots, for six weeks previous to the time of making this sample. Butter made in this way is perfectly sweet, of a good color, and will bring from two to four cents per pound more in market than that manufactured in the ordinary way. It is worth the attention of farmers."

TO PROTECT TREES FROM RABBITS.—Mr. A. G. Hanford writes the "Country Gentleman" that a good way to prevent rabbits from injuring trees in winter, is to take narrow strips of cotton cloth, a yard or more long—old oil cloth will do—and commence at the bottom of the tree, winding it around the body till you get above the reach of the rabbits, and there tie it. Remove in spring, dry and put away for another season. If well cared for these strips will last a number of years, or as long as the trees will need protection.

THE REDUCTION OF PAY OF THE SOLDIERS.—Great opposition is made to the proposed reduction of soldiers' pay, embodied in the bill of Senator Sherman. A memorial has been prepared and is being numerously signed, urging Congress not to reduce the pay of the officers, but to assess upon the present rates whatever tax may be deemed proper, even to twenty or thirty per cent. This proposition is growing into favor, as it is a manifestation of patriotism and not the submission of hirelings. Senator Browning is preparing a bill to meet this suggestion, which covers the entire ground.

UNPOPULAR MEASURES.—Some members of the Constitutional Convention propose to reinstate the old barbarism of the *viva voce* voting, and the old County Commissioner system, and to set our Common Schools back on the old platform, amounting to no education at all.

We would just like to see a vote of the people on these propositions in a separate article to the Constitution. They would be voted down by a larger majority than ever was given by any State on any issue.—*Chicago Journal*.

—"Why, my dear Mrs. Smith, what have you done with your piano?" "Oh, Mr. Smith insisted upon my disposing of it and buying instead a sewing machine for each of the girls. He says they are much more useful and would make much less noise."

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS.

M. L. DUNLAP, EDITOR.

SPRINGFIELD, FEBRUARY, 1862.

### Editor's Table.

WITH FEBRUARY begins the active duties of the new year, and from this time onward one duty after another is brought to our view. The farmer's life is an active one, but the duties are not all arduous, for genius has brought to his aid muscles of iron and sinews of steel, that take from his broad shoulders, sun-browned brow and horny hands a large part of their burthen. It is well, for we have now become so accustomed to what, not long since were deemed luxuries but now necessities of life, that we must have new fields of productive labor open to us to allow us to indulge in the new mode to which we have become accustomed. Free tea, free coffee and free spices, with other free luxuries, are fled, and we may yet go back to them as luxuries and not as necessities. The new year opens an unwritten page, with paper of a sanguine hue, but we hope it will grow brighter and brighter to the end.

THE POLO ADVERTISER says that in the southern part of the State great efforts are being made to produce a crop of cotton; let us of the north make a corresponding effort to grow a crop of flax, and next year we can go well dressed in our own domestic fabrics, and at the same time assert our independence of Secessia and England for our comforts and good appearances.

**COTTON SEED.**—The seed of our native cotton, as well as the seed from New Orleans cotton planted in this State are green, as is proved by samples in our office; we also have samples from seed of North Carolina seed grown in Urbana, all of which is of the same color. The following, headed "Cotton Seed for the Northwest," is from the *Chicago Tribune*:

"The discussion of the question of the introduction of cotton culture into the southern part of this State, or rather the revival of its culture there, has awakened wide attention among all interested, and there is an eager inquiry for seed. One thing, however, seems well established by concurrent testimony of those who are excellent authority in the matter. The scheme of looking to the islands of Beaufort will fail and give no good result. What is wanted is the green seed known as the Tennessee upland cotton. The Sea Island cotton has a black seed, and nothing can be expected from its introduction here but disappointment. As to the green seed, we learn that nearly half enough seed will be furnished in Southern Illinois from last season's crop, and the remainder can be procured from the Southwestern States."

**COTTON CULTURE** in the West is becoming the Court talk, as well as in more humble circles. We need have no fear of a want of seed; two and a half months will accomplish no small amount in this direction.

"The Commissioner of Patents has issued a circular in which he says the cultivation of cotton in the middle portions of the Free States is beginning to attract general attention. It is, however, a principle in vegetable physiology, that tropical plants can never be acclimated in the North, except by a repeated reproduction of new varieties by seed. The attempt to grow Sea Island cotton, such as now brought from Hilton Head, would prove a failure in any portion of the Free States. The only variety capable of successful cultivation in those sections now seeking its introduction, is the green seed cotton, such as is now being raised extensively in Arkansas, Missouri, Tennessee, and portions of Kentucky, and which produces whole fibre. Seed should be obtained from these localities. The modifications of soil and climate will influence the size of the plant, the length and fineness of the fibre, and the product of the crop. Efforts are now making by this department to procure the proper seed for distribution."

**COFFEE IN EGYPT.**—The following is the correspondence of the *Chicago Tribune*:

SPRINGFIELD, Jan. 15, 1862.

The Hon. S. W. Moulton, of Shelby county, informs us that he has tested a sample of coffee grown in Effingham county the past season, by Mr. Geo. L. Hoffman, residing eight miles northwest of Effingham Station, on the Illinois Central

railroad. Mr. M. says that with the exception of a slight taste of rawness, owing doubtless to the want of age of the berry, the sample was fully equal to the best Rio.

Mr. Hoffman received a few seeds of coffee, three years since, from his son in Australia; these he planted, and the past season produced two bushels of ripe coffee. He estimates the yield at thirty bushels per acre.

Thus far the plant appears to be hardy and promises to be productive. Several parties in Effingham county are preparing to enter on its culture. It would appear from the statement of Mr. Moulton that the plant comes into bearing the second year, and the third year it produces a pretty fair crop. The berry is similar to that of Rio, and is doubtless the same.

With these facts before them, the State Agricultural Society have offered a reward of \$50 for the best 500 pounds of Illinois grown coffee, fifty pounds of which must be exhibited at the January meeting; and a premium of \$25 for the best fifty pounds, five pounds of which is also to be on exhibition.

Effingham county is in latitude thirty-nine, and as persons at a distance may be surprised to hear that so many semi-tropical plants grow and mature in this latitude, their surprise will abate somewhat to know that the great volume of heated air, known as the trade winds, passing from the coast of Africa to Central America, is turned in its course by the Andes and is forced north through the valley of the Mississippi river and spreads its genial influence over the prairies of Illinois. We shall watch the progress of this new product of the prairie with a deep anxiety, and shall hope to be able to report its permanent success. This coffee has no connection with the *okra*, an herbaceous plant, whose pods are extensively used in soups at the South. RURAL.

A few days since we met the agent of a large landholder in Christian county, who has made sale of several tracts of land to farmers who have been driven out of Arkansas and Southern Missouri, and to receive pay in the cotton crop; the land is sold at \$20 per acre, the purchaser to put one-half of the land (which has been broken up, and in wheat last season,) into cotton crop, early in May, and give it good culture, for which, when ready for picking, the buyer to have a credit of \$10 per acre, thus paying for the land with two crops grown, without being at any expense in the harvesting. As it will cost little more to cultivate cotton than corn, aside from the picking, this is an easy and sure way to pay for a farm. It is another evidence that men of capital have an interest in the success of cotton culture in the south half of the State.

will contain from thirty-two to forty pages, octavo, or the same size page as the current volume of Transactions. This is not intended to take the place of any of the agricultural journals of the State, but as a convenient vehicle through which to send out a record of their proceedings, essays and such papers as requires to be laid before the public at an early day. At present the plan of publishing biennial reports and waiting until the subject matter grows out of date, is a bad one. They will now be sent out in time to be of use. At this meeting there are some twenty-five essays, all more or less valuable, especially those on sorghum, insects, cotton and the management of soil, that should be sent out before the time of planting arrives, so that the farmers may avail themselves of the information contained in them; and as there is no paper that would wish to undertake the publication of so large a mass of purely statistical matter and detailed statements, though valuable, yet containing a larger proportion of long articles than they wish to inflict upon their readers; hence their publication will prove a valuable aid to those who are directly interested. This journal will also prove valuable for the publication of the list of premiums and awards, and leave for the volume of transactions proper, only such material as will be of permanent value. The price of the journal will be fifty cents—the publication commencing with January. It will be printed at the *Register* office, and edited by John P. Reynolds, Esq., the present able and efficient Secretary of the Board. We have no doubt that this work will prove of immense advantage to the State. It will send broadcast over the State a large amount of valuable practical matter that would otherwise mold on the shelves of the society, waiting the tardy action of a biennial Legislature to send it forth to the people. Now it will go forth with all the freshness of youth to give lessons in every department of rural economy. The number for January will, of course, from necessity, be out rather late, but the others will doubtless be in time. We shall look for the essays on sorghum culture, on soils and on insects at an early day. We welcome our friend Reynolds to the chair editorial.

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**BURN CORN FOR FUEL.**—The *Amboy Times* advises farmers to burn corn instead of wood, for fuel. It urges the question thus:

“We repeat our advice to the farmers of this country to burn corn and save their wood, especially where they are in the habit of selling the former to buy the latter. Corn at thirteen cents

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**JOURNAL OF THE STATE AGRICULTURAL SOCIETY.**—The Society, at its late meeting, decided to publish a monthly journal of their transactions. It

a bushel is as cheap as wood at \$3.50 per cord. If half our corn be consumed this winter for fuel, the remaining half will be worth next spring more than the whole will otherwise be, and then a winter's expense for fire will be saved. Corn will be low as long as the supply exceeds the demand, which will be the case for at least eight months to come. If the rebellion should be put down next summer, we should still find but a meagre market for our corn, for the South will raise less cotton and sugar and more cereals. We have more corn than can be used to profit in the ordinary way of trade, and so we must put it to new uses. Some think it almost wicked to burn corn, and at the same time have no hesitation or compunctions of conscience in selling it to be made into whisky. We maintain that as far as morality is concerned the weight of evidence is all on the side of burning it. Again, what's the difference whether we set apart a portion of land to raise corn, or timber, for fuel? Many old countrymen feel about the same in regard to burning wood that we do in burning corn, and we are not sure but they have the best reason for so feeling. Cast aside your groundless scruples, and cram the corn into your stoves. If some of our subscribers will bring corn in the ear on subscription, we will give two cents above the market price, and follow the advice we give to others."

We agree with the *Times* that it is as proper to burn corn as wood, provided that it cost no more. Fluid that has been so extensively used for light is the product of corn; certainly no one felt any compunction of conscience in its use, nor would they now if kerosene was not both better and cheaper. As will be seen in another part of the *FARMER* we do not subscribe to all the views of the *Times*.

**SOMETHING NEW THAT IS WORTH HAVING.**—The new War Map recently published by Asher & Co., Indianapolis, Ind., has just been revised and thoroughly corrected so that now it is not only the most CONVENIENT POCKET WAR MAP, but the *most correct*. They advertise for county agents to sell in each county, and offer a good discount. We advise any person in want of a good map to send twenty-five cents by mail and they will receive the worth of their money. Any man with from five to ten dollars capital can make good wages as county agent. Address as above.

—"If there is anybody under the canister of heaven that I hate in utter exerescence," said Mrs. Partington, "it is the slanderer, going about like a boy constructor, circulating his calomel upon honest folks."

—Who is the laziest man? The furniture dealer; he keeps chairs and lounges about all the time.

From the Chicago Tribune.]

## Illinois State Agricultural Society— List of Premiums, etc.

SPRINGFIELD, Jan. 16, 1862.

The Treasurer reports on hand \$500. This, with the \$3,000 due from the State, will make a respectable fund for the beginning of the year. The society's journal, it is supposed, will be self-sustaining. It will be edited by the Corresponding Secretary, J. P. Reynolds, Esq., who will make its pages interesting.

The samples of sorghum sugar and syrup are numerous, and in the main highly creditable; the syrup is probably all that could be expected of the crude article, and it is now generally conceded that it is much improved by refining, as is customary with the Southern article. Most of the samples of sugar are more or less clammy, and the only sample that has a lively appearance and color similar to fair New Orleans, is from Ohio, made on Cook's evaporator; yet, like all the samples, it has the vegetable or sorghum taste. The truth is, that no certain mode has yet been discovered to granulate the syrup, and it is certain that when this end is attained, it must be refined to please the taste of a majority of our people.

### PREMIUMS ON ESSAYS.

**ESSAY ON THE CULTIVATION OF COTTON.**—On this subject there were four competitors, one of them a lady. The award was made to C. T. Chase, of Chicago, \$10. Subsequently an essay was received on the adaptation of cotton to the southern half of the State, and its culture, for which a special premium of \$10 was awarded.

**CULTURE OF SUGAR CANE.**—1st premium, \$10 awarded to E. F. Newberry, of Montgomery county.

**PREPARATION OF SOILS.**—Premium of \$10 to J. B. Turner, of Jacksonville.

**DRAINING.**—Premium of \$10 to H. M. Kidder, of Cook county.

**ORCHARDING.**—Premium of \$10 to J. T. Little, Dixon.

**INSECTS INJURIOUS TO VEGETATION.**—Premiums of \$25 each to C. Thomas, Jackson county, and Gen. B. D. Walsh, Rock Island.

Both essays are valuable and will prove of vast benefit to the farmers of the State. The committee were unable to decide which was the best, and cut the gordian knot by awarding a like sum to each of those gentlemen. If our State had paid one tithe of the amount to investigate the living insects that feed on our crops, that they have to those imbedded in the rocks, we should have seen some benefits from it. Five thousand dollars a year for the history of dead insects turned to stone, but not a cent to those that come in swarms to disappoint the cultivator.

### PREMIUMS ON ESSAY FOR 1862.

In addition to the list of last year the Board added \$10 for essay on Flax Culture; \$10 for culture of Tobacco; for \$10 for best essay on culture and manufacture of the Sugar Beet.

To the list of field crops was added \$10 for the best half acre of tobacco, and \$10 for the best half acre of the sugar beet. The premium on coffee you already know. On cotton, for best five acres, \$100; best half acre, \$25. Best bushel of cotton seed, the growth of 1862, adapted to this State, \$10.

The usual farm committees were not appointed. The competitors in place of having the usual examination must make a full report in detail of their operations, upon which the Board will base their award at the annual meeting.

The Board have adjourned to Tuesday, January 25th, for the purpose of considering applications for the place of holding the next Fair, correcting the premium list, and other business that may come up at that time.

Peoria and Sandoval have made formal application, and there are informal applications from three others, but the whole subject will come up at the next meeting.

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THE LEGAL ADVISER.—We have received among our exchanges a monthly journal by the above title, edited by Hon. E. M. Haines, Chicago. \$1 a year.

The number for January contains several decisions of the Supreme Court not yet published in reports. We clip the following that are of interest to our readers :

“Money paid under a misapprehension of facts may be recovered; so, also, if there be a total failure of the consideration for which the money was paid.”

The above will be good news to all those who have made advances on worthless implements, to responsible dealers, and will be a caution and show how far it is safe to recommend an implement for the sake of *making a sale*.

“HIGHWAYS.—Where a road, after its survey and location, has not been opened for the use of the public, nor the proper notice given the owner of the land to remove his fence, neither the commissioners nor any other person can remove a fence without becoming trespassers. If parties over whose land a road has been laid, having notice, real or constructive, fail to claim damages at the appropriate time, they will afterwards be estopped.

“The purchase of land and payment of the money, followed by possession by the purchaser, and the making of lasting and valuable improvements upon the premises by him, takes a verbal agreement for the sale of lands out of the statute of frauds, and entitles the purchaser to a specific performance of the agreement.”

“RAILROAD CORPORATIONS.—The act approved 14th February, 1855, requiring all railroads then completed and open for use, to be fenced, and imposing as a penalty for non-compliance, the payment of all damages which may result to cattle thereby, although such requirement was not

expressed in their charters, does not conflict with the 17th section of the 13th article of the Constitution.

Acts of incorporation are subordinate to general police regulations.

The act to regulate the duties and liabilities of railroad companies, passed in 1855, applies to companies previously incorporated. Since the passage of that act railroad companies in Illinois are liable for injuries to cattle that may have strayed on to their tracks, through the want of the required fences or cattle-guards. If a railroad company has erected and maintained sufficient fences and cattle-guards, then the onus is on the claimant to show a negligent or willful act by the company, before he can recover.”

It is probable that the above decision under the Act of 1855 only refers to cattle on farms adjacent to the track, for it hardly appears right to compel the railroad companies to protect themselves against all the vicious cattle that people might turn out into the common or highway. We believe in compelling people that own stock to take care of it, and to the holding adjacent owners to a strict accountability to each other, and compelling all others to fence in their stock, or take care of it both as against farmers and railroads. Where farmers gain some undue advantage against the railroad it is but natural that they should retaliate in some way.

“Books of account are admitted in proof under certain circumstances, as secondary evidence, but not where the party offering the proof had clerks or servants in his employ who could have been called to prove the delivery of the goods and the fairness of the entries.”

Farmers would do well to act on the above hint, and when they have dealings with others to any extent in the way of book accounts, get a good sett of blank books and make their entries in a clear, intelligible manner, and not, as is too often the case with farmers, in some little memorandum book in a slipshod manner without date.

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RECIPES FOR COOKING.—Not having set ourself up for a good cook we are not enabled to give our readers whole pages of recipes for cooking, either fancy or plain; taking it for granted that every family of any pretensions to good living are in possession of a good cook book with its thousand recipes for goodies, we have concluded that our pages could be more profitably filled than with reprints of these works, and not being a judge we should be liable to make very many bad selections. So soon as we can obtain a good lady editor who is posted in all manner of household duties and has a charming style, we shall engage her—for the Chief Clerk in the FARMER office.



MAPLE SUGAR.—In view of the tariff on sugars great preparations are being made among the farmers for making maple sugar the coming season. There are tens of thousands of maple trees in our forests, and there is no doubt but they will be made useful the coming spring.—*Niles (Mich.) Republican.*

The Waukegan *Gazette*, commenting on the above, says “the increased tariff on sugar, and the consequent rise in the price, should induce an increased manufacture from the maple. The forests of Michigan and Wisconsin abound in the sugar tree, and if the proper attention was given to the manufacture of the article, more than a sufficiency could be produced in those two States to supply the home demand. This would be a great saving to the people; besides this, they would get a far better article than the imported sugar.

“Even in these troublous times, we presume it will not be considered an act of disloyalty to engage in the business of making maple sugar. It is true, it may somewhat affect the revenue, and cause a falling off of funds to speculate on in army contracts; but for all this, it is sound policy and wisdom to cultivate the sugar fields which nature has given us, to the exclusion of the imported article.

“The capabilities of the sugar tree in either of those States, to yield, is over 10,000,000 lbs. annually; yet this great source of sweets is almost neglected by the people inhabiting those regions, much to their pecuniary loss.”

There is a singular fact in regard to the sugar maple in the prairie groves, that the yield of sap is not only very limited, but of an inferior quality. In some of our river bottoms there is some improvement, but on the whole the sugar maple in the groves and river belts of the prairies is of little value for sugar. The making of maple sugar is a laborious and many times an unhealthy business, inducing colds, etc. When a boy we had ample opportunity to learn all about making sugar in the sugar fields of New York, but we prefer the sorghum, and have greater faith in a supply from that source than from the maple.

GARDENERS’ MONTHLY.—We have received the January number of the “Gardeners’ Monthly,” edited by Thomas Meehan, published by W. G. P. Brinklie, 23 North Sixth street, Philadelphia. Truly does the above title apply to this number, for should each succeeding one be as valuable, it will be worth ten instead of one dollar a year to persons interested in horticulture and its kindred branches.

ILLINOIS COFFEE.—We have a suspicion that the Illinois coffee noticed in another part of the FARMER is nothing more nor less than the OKRA,

that is so common in the gardens of the south, and often met with at the north. In our next we shall be enabled to speak of it in more positive terms, and in the meantime let people hold on to their loose change and let the coffee wait further development. Possibly it is the Japan pea.

OHIO STATE REGISTER.—This is a valuable little hand book sent out by the “Field Notes;” is both valuable and interesting to all Western men. It is sent out at ten cents. Address “Field Notes,” Columbus, Ohio.

ILLINOIS TROOPS AT FORT DONALDSON.—It may be interesting to our readers to know that among the troops investing Fort Donaldson, are the following from this State, viz: Twentieth, Col. Reardon; Eighth, Col. Oslesby; Seventh, Col. Cook; Eighth, Lieut. Col. Rhodes; Eighteenth, Col. Lawler; Thirtieth, Lieut. Col. Dennis; Thirty-first, Col. John A. Logan; Twentieth, Col. Marsh; Forty-eighth, Col. Haynie; Eleventh, Col. Hart; Forty-fifth, Col. Smith, and some others impossible at present to obtain. Batteries—Schwartz’, Dresser’s, Taylor’s, McAllister’s, Richardson’s, Willard’s and Buell’s, in all thirty-four guns. Cavalry—Col. Dickey’s and part of Col. Kellogg’s regiments; Capts. Stewart’s, Dollins’, O’Harnet’s and Karmichel’s companies, with Gen. Grant’s body guard, Capt. Edward Osborn Commander-in-Chief, Gen. Ulysses S. Grant; Commanders of Brigades, Gens. McClernand, Smith and Wallace.—*Ex.*

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### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors

may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin now, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

 Correspondents will please be particular to give the name of the post office, county and State.

 Specimen numbers will be sent gratis, upon application

 Address

BAILHACHE & BAKER,  
Springfield, Illinois.

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**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign. tf

## PLOWS! PLOWS!!

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 Clay soil plows—Cut 10, 11 and 12 inches, right and left hand, double and single shin, wrought standard.  
 No. 3—Cut 12 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 4—Cut 14 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 5—Cut 16 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 3—Clipper plow; cut 12 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 4—Clipper plow; cut 14 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 3—Cast steel, cast standard, right and left hand, double and single shin: **BOTTOM LAND PLOW**, cut 12 inches.  
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 No. 3—Cut 12 inches, right and left hand, single and double shin, with wrought and cast standard.  
 No. 4—Cut 14 inches, right and left hand, single and double shin, wrought and cast standard.  
 No. 5—Cut 16 inches, right and left hand, single and double shin, wrought and cast standard.  
 No. 3—Clipper plow, right and left hand, single and double shin, wrought and cast standard.  
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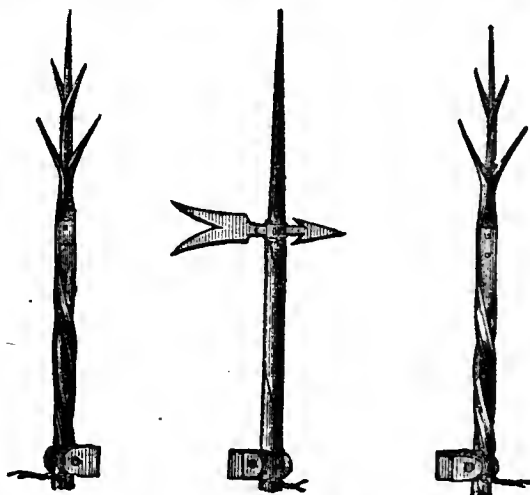
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 25,000 two " " "  
 12,000 three " " "  
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## PROSPECTUS FOR THE

JOURNAL OF THE  
Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

**AGRICULTURE IN ALL ITS BRANCHES,**  
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All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

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Catalogues will be furnished on application by the middle of August.

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TREES IN POTS,

For orchard houses.

Address ISAAC PULLEN, Hightstown, New Jersey.

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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, MARCH 1862.

NO. 3.

## March.

In this latitude this is the first month of actual spring, as it is the first on the calendar, but a few degrees further north and spring waits for April before the time of seeding is at hand. The first week in March is the usual time to sow spring wheat, though not always. We generally begin to lift trees in the nursery by the tenth of the month, occasionally before, but seldom later, though a cold snap of three or four days will sometime intervene after this. Spring wheat is always better for undergoing one or two such tight spells of weather. Oats should not be sown before the last of the month, though barley can follow soon after the spring wheat. Grass and clover seed that has not been sown on the winter grain should be attended to at once. In seeding with spring grain we sow after finishing with the harrow and roll at once after seeding. Spring wheat and barley are the best spring crops to seed with. Oats are not as good, for should the crop be heavy the foliage which is so abundant on this grain, so shades the ground that the grass and clover become slender, sickly plants, and if followed by hot weather for a few days after harvesting the sudden exposure is pretty sure to kill them, while on the other hand, if followed by cloudy wet weather they soon recover and make a vigorous growth; for these reasons we do not seed after oats unless compelled to do so.

THE WOOD PILE should be carefully looked to, and on such days as the farm work cannot be attended to, advantage should be taken of it to have an abundant supply of good wood ready for the stove, or kitchen

fire. It is bad economy to use green wood or to be compelled to stop in the hurry of other work to haul up a load of wood or to cut it for the stove. No good farmer will allow himself to be cutting fire wood when other work is pressing. Coals are extensively used for fuel; these must be housed and kept dry or a few rains will spoil them.—Corn is also used to some extent, but we doubt its economy; corn cannot be put into the crib at less than fifteen cents a bushel, and from what we have tried it, two bushels are not worth more than one bushel of first quality Illinois coal. That is at fifteen cents a bushel, it is equal to coal at seven dollars and a half a ton, an average loss of three and a half dollars, or eight cents a bushel, for the corn. It is possible that we are not precisely accurate in this estimate, but it cannot be far from the truth. We know that steam works at this point prefer coal at the current rates to corn at ten cents. We have seen no estimates of its value for steam, though it is often used with coal to get up steam at once, in starting the fire or to suddenly renew it; it burns freely and produces a large amount of flame. On the whole we cannot consider the use of corn for fuel at all profitable, though if the farmer will persist in supplying green or rotten wood the good wife would be considered at perfect liberty to draw on the corn crib under every such provocation.

HOT BEDS should now be looked after; see that sash is in order and have the manure piled so as to undergo the first process of fermentation before using, this is very important to the stability of a good hot bed.



GARDEN SEEDS should be looked over, and what is lacking purchased. We are no longer under the necessity of purchasing old seed kindly sent West by seed dealers, as we have them grown on our own soil. S. Wilbur, of Momence, Kankakee county can supply the demand. Better get Illinois grown seeds, perhaps with the exception of turnip seed, as we have fancied that the English grown is the best, but it may be fancy after all. Should you want eastern seed send at once to the large seed stores in the cities, for, as a general thing, they have good fresh seed, and it is seldom they send old seed to their customers, as the old seeds are sold to *amateur seedsmen* done up in new papers and sent out to the country store both east and west; *look out for them*. Our best Chicago gardeners now use home grown seed, and no class of men grow better cabbage and root crops than they do. For our own use, what we do not grow we draw on Mr. Wilbur for the supply.

FENCING.—March and April are the best months for putting up board fences. We never set fence posts with an augur or spade, for the simple reasons that they are set cheaper with an iron maul where the ground is soft, and are much firmer; and as the earth is firmly packed about them will last longer. Always set the top end down, as we know from frequent examinations that thus set they are more durable.

FARM ROLLER.—No farmer should be without a good roller. The prairie soil is porous and many times lumpy, and seeds not well covered dry out and are lost; with the use of the roller we insure a better stand of all kinds of seed, while the loose surface is packed on to the seeds and prevents the dying out, and at the same time crushes the clods. An iron section roller is better than one of wood, but the wood is better than none. A roller need not be large; ours is twenty-two inches in diameter and is as large as needed.

FRUITS.—Because the times are hard and money scarce do not forget to set out fruit

trees. They can be had cheap at this time, as the nurserymen are anxious to sell; see that you get the proper varieties. The last volume of the FARMER contains more valuable, practical information in regard to fruit culture on the prairie than has ever before been published; it will well repay you to study it more thoroughly before you make up your orders for trees and plants; see, also, the two last numbers in regard to the doings and sayings of the State Horticultural Society.

[From the Farmer's Advocate.]

WHY DO WE FEED OUR CATTLE SALT?—A long time ago, says Mr. J. S. Chandler, of Rockton, Ills., I noticed an Inquiry in the *Advocate* in regard to feeding our cattle salt. I do not recollect the inquirer's name, but I thought at the time he knew the whys and wherefores and wished to find out whether any one else knew exactly why we feed salt to our cattle and use so much of it ourselves. I have waited patiently for some one to answer this important question, as I wished to know whether it was really necessary to use salt or whether it was a habit, like many other things. James F. Johnson, A. M., writes thus in regard to the chemical use of salt:

"The wild buffalo frequents the salt licks of North Western America; the wild animals in the Central parts of Southern Africa are a sure prey to the hunter who conceals himself by the salt springs and our domestic cattle run peacefully to the hand that offers it a taste of this delicious luxury. From time immemorial it has been known that without salt man would miserably perish; and among horrible punishments entailing certain death, that of feeding culprits on saltless food is said to have prevailed in barbarous times. Maggots and corruption are spoken of by ancient writers as the distressing symptoms which saltless food engender; but no ancient or unchemical modern could explain how such suffers discomfort and why it ultimately falls into disease if salt is for a time withheld. Upwards of half the saline matter of our bodies—57 per cent.—consists of common salt; and as this is partially discharged every day through the skin and kidneys, the necessity of continued supplies of it to the healthy body becomes sufficiently obvious. The bile also contains soda as a special and indispensable consistent, and so the cartilages of the body. Stint the supply of salt, therefore, and, and neither will the bile be able to assist the digestion, nor the cartilages to be built up again as fast as they naturally waste."—*Chemistry of Common Life*, p. 327, 328.

Thus we see the necessity of the use of salt in order to produce the comforts and enjoyments of life, and prolong our existence.

A dull and plausible man, like an unrifled gun, is a smooth bore.

## American Pomological Society—Revision of the Society's Catalogue of Fruits.

"At the last meeting of American Pomological Society, held in Philadelphia on the 11th, 12th and 13th of September, 1860, the following resolution was offered by P. Barry, and unanimously adopted:

*Resolved*, That, in conformity with the recommendations of the President in his annual address, and of the general chairman of the Fruit committee, Samuel Walker, Esq., at the last meeting of the Society in the City of New York, a local committee of five be appointed in each state and territory, which shall be charged with the duty of preparing a catalogue of the fruits in its own locality, on the same general plan as the Society's catalogue, due regard being had to soil, climate, position, and other circumstances affecting the tree and fruit, and that the Chairman of such local committees shall be the Chairman of the State committee, with power to appoint his associates.

*Resolved*, That a Special Committee be appointed by the Chair at this time, to whom these various Local Committees shall make their report during the year 1861; and that such Special Committee be charged with the duty of compiling from the Local Catalogues, prepared by the various Local or State Committees, and from the present Catalogue of the Society, full lists of all the fruits therein named, properly classified and arranged, with due regard to nomenclature and terminology, and shall submit the same at the next biennial session of this Society for its consideration and action.

In compliance of the second resolution, the following gentlemen were named by the Chair as the Special Committee:

P. BARRY, Rochester, New York.  
J. S. CABOT, Salem, Mass.  
J. A. WARDER, Cincinnati, Ohio.  
CHARLES DOWNING, Newburgh, New York.  
L. E. BERCKMANS, Augusta, Georgia.  
WM. REID, Elizabethtown, New Jersey.

To which was added, by vote of the Society, Hon. Marshall P. Wilder, the President."

Having been appointed chairman of the local committee for this state, I have made up the fruit committee as follows:

A. S. COE, Port Byron, Rock Island County.  
J. H. STEWART, Quincy, Adams "  
S. G. MINKLER, Specie Grove, Kendall "  
CHAS. COLBY, South Pass, Union "

"The various State committees of this Society, are expected to submit accurate and full reports of the condition and progress of fruit culture within their limits, together with definite answers to each of the following questions:

What *six, twelve and twenty* varieties of the *apple* are best adapted to an orchard of *one hundred* trees for family use, and how many of each sort should it contain?

What varieties and how many of each, are best for an orchard of *one thousand* trees, designed to bear fruit for the market?

What *six* and *twelve* varieties of the pear are best for family use? on pear stock? what on quince stock? What varieties and how many of each are best adapted to a pear orchard of *one hundred* or of *one thousand* trees?

What are the best *six* and *twelve* varieties of the peach? What are the best varieties and how many of each are best adapted to a peach orchard of *one hundred* or *one thousand* trees?

Answers to these questions should be made from reliable experience, and with reference to the proximity and remoteness of the market.

It is desirable that the several reports be sent to me at an early day; that a full report for the State committee be made as required, a month before the annual meeting to the general committee, that they may be enabled to make up a full report.

It is of importance that the members of the committee go to work, irrespectively, place their State in its true position as a great fruit growing State. Reports should be directed to

M. L. DUNLAP,  
Chairman.

The following will explain itself:

M. L. DUNLAP, CHAIRMAN OF LOCAL STATE FRUIT COMMITTEE. *Dear Sir*:—At the last meeting of the American Pomological Society, held in Philadelphia on the 11th, 12th and 13th September last (1860), action was taken upon the revision of the Society's fruit catalogue, as will be seen from the subjoined extract from the proceedings, and the undersigned were appointed a special committee to receive the reports or catalogues of local or State committees, classify and arrange the same, and submit them to the Society at its next biennial session, to be held in Boston in 1862.

It is therefore our duty to request you, as Chairman in your State, to organize your committee and enter upon the work of preparing your catalogue at once, so that it may be transmitted to us sometime during the ensuing year, 1862, as provided in the resolution.

In preparing your report or catalogue, you will please observe that the arrangement of the present catalogue of the Society is to be followed as closely as possible, giving,—

1st, A list of varieties/suitable for general cultivation in your State, or such other region or district of country as your committee represents;

2d, A list of such new or newly introduced varieties as promise well;

3d, A list of such as are known to be valuable for such purposes,—as for marketing, or for particular soils and localities only.

It is the design and aim of the Society to make its catalogue so comprehensive and accurate that it may become the standard of American Pomology; hence it is important that committees exer-

cise the greatest care in preparing their lists, accepting such information only as they know to be perfectly reliable.

It will be understood that no varieties are to be classed for "general cultivation" within any State or locality, upon brief or partial experiment, but must be *generally and successfully* cultivated for a considerable period of time. In the case of those classified for particular localities or purposes, the nature of these particulars should in all cases be given if possible.

Trusting you will find it convenient to give prompt attention to this work, we remain,

Very Respectively,

P. BARRY, Chairman,

J. S. CABOT,

L. E. BERKMANS,

J. A. WARDER,

CHAS. DOWNING,

WM. REID,

MARSHALL P. WILDER, *Pres. Ex-Off.*  
*Committee.*

### Low Heads the Best Winter Protection for Trees.

Fruit trees of all kinds, we believe, are greatly to be preferred with low heads; but the popular taste demands them quite high.

Nursery men, of course, find it to their advantage to supply the wants of their customers; hence trees as generally sent out have their heads pretty well trimmed up.

Trees two or three years old (the proper age for planting) may easily be remodeled to suit the planter; if trimmed too low, trim up; if too high, cut back. Do this at the time of planting. As a rule, the more you shorten, the less the risk of transplanting, and the better the subsequent growth.

The cherry, the apple and the pear, with long and naked stems, are apt to be injured during winter and early spring, by the action of the sun upon the exposed bodies. Protection from this is desirable; the best is the shade of a low spreading top. There are many other reasons why low headed trees are best.

Where a tree has already attained considerable size, and the form cannot be easily changed, some other protection should be devised.

Sometime since, while visiting the grounds of a successful orchardist, on the Hudson, we observed his pear trees were protected on the south side by strips of bass matting the whole length of the trunk, tied loosely. Long rye straw would do equally well.

He remarked that, beside preserving the bodies from injury, since he had pursued this practice, his trees were more exempt from blight.

The culture of the finer sorts of the cherry is often unsatisfactory in the west, by reason of the cracking of the bark. With this treatment better success might be had; the experiment is at least worth making — *Wis. Farmer.*

The system of low heads is bound to win, as one after another gives in his adhesion to it. It is certain that with high heads, the fruit crop is not

only tardy, but uncertain, with low heads we cannot be any worse off, and may be much better. Let us give it a thorough trial. Ed.

[From the Farmers Advocate, Chicago.]

### Sorghum and Imphee.

MESSENGERS. EDITORS:—I promised some time last fall to report my experience in the raising and manufacturing of Sorghum. I will now also state what I have seen of other manufacturers.

In the Spring of 1861 I sowed a small bed of the black Imphee, as an experiment. I let it remain in the bed until it had attained a height of about six inches; after I had planted in the field all I expected to, I transplanted out of the bed. I set out one fourth of an acre, and it ripened some three weeks earlier than that which had not been transplanted. I also found that which was transplanted to be much the easiest tilled. I think this the best way of putting out Sorghum. If the land is drilled, or check-rowed, it is not so much work as one would suppose. Last year's crop did not yield as well per acre as former years. I think this may be accounted for by the difference in seasons, and not in manufacturing.

Many are of the opinion that the best way to manufacture is to boil the expressed juice without clarifying, or using any ingredients whatever. I differ from this opinion. If never so carefully skimmed, the syrup, if made without clarifying the juice, will have the taste of the cane.

I have manufactured of three different kinds of Imphee, and all make a different kind of syrup. Chinese cane grown upon different soils differ in quantity and quality. I have lost much from impure seed.

I can get but little information about cane sugar. At one manufactory I saw about 300 pounds of sugar, but none that I have seen is pleasant tasted, although it may be light colored.

I have made an article from cane juice which I call cider, but I will have to give it a new name. I propose calling it "Plantation Champagne." We think it a good substitute for cider, and with experience, have no doubt it will take a place and rank with the best champagnes. So we may obtain sugar, syrup, champagne and vinegar from this new article of Chinese sugar cane; and beside all this, the seed is valuable for distilling purposes and for feeding stock. What other crop do we raise that is of greater value?

S. P. WHITING.

Alton, Knox Co., Ill., January 24, 1862.

—Sometimes a lightly uttered word destroys an existence, or takes away the happiness or repose of a family. What matters it? We have laughed!

—A good many of Nature's human productions are written in cypher—a kind of cypher, which like that in mathematics, means nothing.

## Weights and Measures of Various Farm Products and Other Things in Various Countries.

In England and America grain is generally rated by the bushel, though it is not the same measure; for here we use the Winchester bushel, which contains 2,160 42-100 cubic inches. There, since 1826, the legal measure is called the imperial bushel, which contains 2,218 cubic inches; so that 32 of their bushels are about equal to 33 of ours.

The following are the commercial weights of a bushel of different articles, viz: Wheat, beans, potatoes and clover seed, 60 pounds. Corn, rye, flaxseed and onions, 56 pounds. Corn on the cob weighs 70 pounds. Buckwheat, 52; barley, 48; hempseed, 44; timothyseed, 45; castorbeans, 46; oats, 32; bran, 20; blue grass seed, 14; salt, 50, according to one account, but Onondaga salt is 56, (the real weight of coarse is 85 pounds to the bushel;) dried apples, 24; dried peaches 33, according to a table lately published in numerous papers, but according to our experience both are wrong. We have seen thousands of bushels sold at 22 pounds to the bushel, which will measure about three pecks.

*Heaping Measures.*—Potatoes, turnips, and esculent roots, apples and other fruits, meal and bran, and in some states oats are sold by heaping measure, which contains 2,815 cubic inches. The size of a Winchester bushel measure, is a circular ring with straight sides 8 inches high and  $18\frac{1}{2}$  in diameter. A box 12 inches square, with sides 7.7 1-32 inches high, will hold half a bushel.

*Barrel Measures.*—Rice, 600 pounds; flour, 196 pounds; powder, 25 pounds; cider and other liquids, 30 gallons; corn, 5 bushels, shelled. By this latter measure crops are estimated, and corn bought and sold throughout most of the Southern and Western States. At New Orleans, a barrel of corn is a flour barrel full of ears. In some parts of the West it is common to count a hundred ears for a bushel.

*Ton Weight and Ton Measure.*—A ton of hay or any coarse bulky article usually sold by that measure, is twenty gross hundred; that is, 2,240 pounds; though in many places that ridiculous old fashion is being done away with and 2,000 pounds only counted to a ton.

A ton of lumber, if round, consists of 40 cubic feet; if square, 54 feet. A tun of wine, is 252 gallons.

A *Quarter of Corn* is the fourth of a ton, or eight imperial bushels. This is an English measure, not in use in this country, though very necessary to be known, so as to understand agricultural reports. So of several of the following weight and measures:

A *Lasp* of oat, ashes, herring, &c., 12 barrels; of corn, 10 quarters; of gunpowder, 24 barrels; of flax or feathers, 1,700; of wool, 12 sacks.

A *Sack of Wool* is 22 stone; that is, 14 pounds to the stone, 308 pounds.

A *Boll of Wool* is the same weight.

A *Pack of Wool* is 17 stone 2 pounds—240 pounds, a pack load for a horse.

A *Tod of Wool* is 2 stone, that is 28 pounds;  $6\frac{1}{2}$  tods 1 wey; and 2 weys a sack.

A *Clove of Wool* is 7 pounds, or half a stone. Recollect, a stone is 4p pounds, when talking of wool, and other meats, it is only pounds.

A *Truss of Hay*, new, 60 pounds; old, 56; of straw, 40 pounds. A load, 36 trusses.

A *Firkin of Butter* is 56 pounds; a tub 84.

A *Scotch Pint* contains 105 cubic inches, and is equal to four English pints.

A *Farlot of Wheat* is  $21\frac{1}{2}$  Scotch pints.

*Troy Weight and Avoirdupois Weight.*—One hundred and forty-four pounds avoirdupois are equal to 175 pounds Troy—175 ounces Troy are equal to 192 ounces avoirdupois. All precious metals are bought and sold by Troy weight.

*Kilogramme of France* is 1,000 grammes, and equal to 2 pounds 2 ounces, 4 grains avoirdupois.

A *Chaldron of Coal* is  $58\frac{1}{2}$  cubic feet, generally estimated 36 bushels. A bushel of anthracite coal weighs 80 pounds, which makes the weight of a chaldron 2,880.

*Weights of a Cubic Foot.*—Of sand or loose earth, 95 pounds; compact soil, 124; strong or clayey soil, 127; pure clay, 135; mixture of stones and clay, 160; masonry of stone, 205; brick, 125; cast iron, 450, steel, 489; copper, 486; lead, 109; silver, 654; gold, 1,203; platina, 1,218; glass, 180; water, 62; tallow, 59; cork, 15; oak timber, 73; mahogany, 66; air 0.0753. In the above, fractions are disregarded.

A *Bale of Cotton*, in Egypt, is 90 pounds; in America, a commercial bale is 400 pounds, but is put in different States varying from 280 to 720 pounds. Sea Island cotton is put up in sacks of 300.

A *Bale of Hay* is 300 pounds.

A *Cord of Wood* is 128 solid feet usually put up 8 feet long, 4 feet wide and 4 high. In France a cord of wood is 576 feet.

A *Stach of Wood* is 108 solid feet; 12 feet long, 3 high, and 3 wide. A *skid* of wood is a round bundle of small sticks, 4 feet long, girding for a one notch, 16 inches; two notch, 23 inches; three-notch, 28 inches; four-notch, 33 inches; five notch, 38 inches. A *billet* of wood is similar to a skid, being 3 feet long, 7, 10 and 14 inches round. They are sold by the score or hundreds. A score is 20 in number.

*Fagots* are bundles of brush 3 feet long and 2 feet round. A load of fagots is 50 such bundles. A *quintal* of wood is 100 pounds. All fuel should be sold by the pound.

A *Perch of Stone* is 25 feet, piled, or 22 in the wall.

*Lime and Sand* to a perch of stone. Three pecks of lime, and two-thirds of a one horse cart load of sand.

*Weight of Lime.*—A bushel of limestone weighs 142 pounds; after it is burned, if weighed directly from the kiln, 75 pounds; showing that 67 pounds of carbonic acid and water have been

driven off by fire. This bushell of lime will absorb 20 pounds of water, gradually applied during several days, and will then be in a state of dry powder, weighing 93 pounds; showing that 18 pounds of water have been converted into a dry substance.

*To Measure a Ton of Hay.*—One hundred cubic feet of hay, in a solid mow or stack, will weigh a ton.

*To Measure Cattle by Compute Weight.*—Ascertaining the girth back to the shoulders, and the length along the back, from the square of the buttock, to a point even with the point of the shoulder blade; say the girth is 6 feet 4 inches and the length 5 feet 3 inches, which, multiplied together, gives 31 feet. Multiply this by 23, the number of pounds allowed to the foot, between 5 and 7 feet girth, and the result is 713 pounds, for the number of pounds of beef in the four quarters. Girths, from 7 to 9 feet, allow 31 pounds to the foot. Cattle must be fat and square built to hold out weight.

*To Measure Grain in Bins,* multiply the length and width together, and that product by the height in cubic inches, and divide by 2,150, and you have the number of bushels.

*To Measure Corn in the Ear,* find the cubic inches as above, and divide by 2,815, the cubic inches in a heaped bushel, and take two thirds of the quotient for the number of bushels of shelled corn. This is upon the rule of giving three heaping half bushels of ears to make a bushel of grain. Some falls short and some overruns this measure.

*Board Measures.*—Boards are sold by the face measure. Multiply the width in inches by any number of pieces of equal length, by the inches of the length. Divide by 144, and the quotient is the number of feet, for any thickness under an inch. Every fourth inch increase of thickness adds a fourth to the number of feet in the face measure.

*Land Measure.*—Every farmer should have a rod measure, a light stiff pole, just 16½ feet long, for measuring land. By a little practice he can learn to step just a rod at five steps, which will answer very well for ordinary farm work. Ascertain the number of rods in width and length of any lot you wish to measure and multiply one into the other and divide by 160, and you have the number of acres, as 160 square rods make a square acre. If you wish to lay off one acre square, measure 13 rods upon each side. This lacks one rod of being full measure.

*Government Land Measure.*—A township is six miles square, and contains 36 sections, 23,040 acres. A section, one mile square, 640 acres. A quarter section, half a mile square, 160 acres. As this is 160 rods square, a strip one rod wide, or every rod in width, is an acre. A half quarter section is half a mile long, north and south, almost universally, and a fourth of a mile wide, 80 acres. A quarter-quarter section is one-fourth of a mile square, 40 acres, and is the smallest sized tract, except fractions, ever sold by the government. The price is \$1.25 an acre.

**SCRIPTURE MEASURES.**—“*A Sabbath Day's Journey*” is 1,155 yards—about two-thirds of a mile. *A Day's Journey* is 33½ miles, *A Reed* is 10 feet 11½ inches. *A Palm* is 2 inches. *A Fathom* is 6 feet. *A Greek Foot* is 12½ inches. *A Hebrew Foot* is 1 212-1000 English feet. *A Cubit* is 2 feet. *A Great Cubit* is 11 feet. *An Egyptian Cubit* is 21 888 1000 inches. *A Span* is 10 944-1000 inches.

As the superficies of all our States and counties are expressed in square miles, it should be borne in mind that the contents of a mile is 640 acres.

*Number of Square Yards in an Acre.*—English, 4,840; Scotch, 6,150; Irish, 7,840; Hamburg, 11 545; Amsterdam, 9,722; Dantzic, 6,650; France, (hectare,) 11,960; Prussia, (morgen,) 3,053.

*Manure Measure.*—This is generally estimated by the load, which is just about as definite as the phrase. “about as big as a piece of chalk.” It ought to be measured by the cubic yard or cord. A cubic yard is 27 cubic feet, each of which contains 1,728 cubic inches. A cubic cord is 128 cubic feet. As the most of farmers have an idea in their minds of the size of a pile of wood containing a cord, they would readily compare that with the quantity of manure, if stated in cords. Every cart or wagon box, before it leaves the maker's shop, ought to have the cubic feet and inches it will contain, indelibly marked upon it. This would enable the owner to calculate the amount of his load of grain, roots, earth, stone, or manure.

The above table will be found both useful and curious. We cut it from some exchange several years since, and now transfer it from our scrap-book.

ED.

—A queer-looking customer inserted his head into an auction store, and, looking gravely at the knight of the hammer, “Can I bid, sir?” “Certainly,” replied the auctioneer, “you can bid.” “Well, then,” said the wag, walking off, “I bid you, good night.”

—A young Bull, sojourning at one of our hotels, was overheard, in conversation, yesterday, to say, with reference to Lowell's last pungent “paper” in the Atlantic Monthly. “It is vewy diswespectful to Hengland, and vewy hillitewat; so much so, that it is positively quite hidle to hattempt a pewusal.”

—Wordsworth cautions a studious friend against “growing double,” but the girls think it is the best thing a nice young man can do.

—“Sam, do you know why that stick of wood you're sawing is like the elephant that was here last week?”

“I'll be hanged if I can see any resemblance. Why is it, Bill?”

“Because you saw it, to be sure!”



## St. Louis County Horticultural Society.

Society met on Saturday, Jan. 25th, at 10 a. m., at No. 32 North Fifth street, President Mudd in the chair.

The agent of the American Wine Company presented a bottle of native Champagne which was tested and commended by the members.

N. J. Colman, of the *Valley Farmer*, presented to the society some Tennessee upland cottonseed. He said the seed presented was a sample taken from over fifteen hundred bushels, which he expected to distribute among the farmers of Missouri and Illinois the ensuing spring. From all the testimony he could gather, cotton could be successfully cultivated throughout the entire southern half of Missouri and Illinois.

Dr. Edwards said he had cultivated cotton as a farm crop in Kentucky with good returns. Formerly the crop was cultivated largely in the vicinity of his native place, Russellville, Ky. The cotton grew well and yielded well. Some twenty-five years ago he removed to Edwardsville, Madison county, Illinois, and for many years nearly every farmer in the vicinity, and throughout the Southern half of Illinois, cultivated enough cotton for domestic use. It was worked up altogether by the female portion of the household by hand. The culture was gradually abandoned, not because the plant did not succeed well, but because the fabric could be worked up cheaper by Eastern mills than by ladies' fingers. He thought the seed procured from Tennessee or Arkansas would be far preferable to that obtained from the sea coast.

President Mudd said that as long ago as he could recollect cotton was cultivated extensively in Pike county, Mo. Some of his earliest recollections were of fields of cotton. He was but a lad, then, but the white fields of cotton were distinctly impressed upon his mind. The manufactured goods finally could be sold cheaper than they could be sold cheaper than they could be made by hand, and consequently its culture was gradually abandoned. He said Pike county was about one hundred miles north of St. Louis, and he never heard of any complaints of the plants not succeeding well, or that the yield was not good.

Mr. Bayley said he could furnish the Society with samples of cotton of the growth of 1861, which he raised in this county. The plant seemed to be perfectly at home in our soil, and ripened its bolls well.

The question for discussion for the day was the best site for planting an apple orchard.

Mr. N. J. Coleman being called upon, said that the apple was a fruit that could be planted almost anywhere with a certainty of good returns, if well planted and properly taken care of. They could be planted on hills or in valleys, and would give profitable returns. When the fruit grower has the choice of slopes he would recommend him to plant upon a northern exposure. The sap will not rise so soon, and the blossoms will open from one or two weeks later on a northern exposure than on a southern, and by this means a crop of fruit will be saved frequently on the north side, when the buds in blossom on the south side will

all be destroyed by frost. Our climate is very variable, and we frequently have warm weather enough in February or March to set the sap even in the apple tree on southern slopes prematurely into circulation and severe cold weather follow, freezing the sap, rupturing the sap vessels, and eventually destroying the tree. For these reasons he preferred almost any other exposure to a southern one. He would in all cases prefer a limestone soil for an apple orchard.

Mr. Kelly thinks the difference in the slopes is of but little importance. He should pay more attention to the training of the tree.

Mr. E. R. Mason—It is my impression that the northern slope will produce the most fruit, but that the southern slope would produce fruit of the best quality. I reason from analogy. It is well known that the grape for wine purposes is better when raised on an exposure to the sun. The hot suns of summer are necessary to give the grapes a sufficiency of saccharine matter to make good wine. From this I infer that the best apples would be produced on trees fully exposed to the sun on a slope facing to the south.

Dr. Edwards—What is the difference between an eastern and western declivity for apples?

Mr. Mason—I apprehend the eastern to be the better. It is shielded on the west from the cold winds and storms.

Mr. Colman differed from Mr. Mason in regard to the quality of apples being better, on the south side than on the north side of the hill. To prove his position Mr. Mason had introduced the grape, not an analogous fruit, and no way related to the apple. Because the grape needed a great deal of sun and heat to perfect it, it was no reason the apple did. It is a well known fact that apples succeed better in a more northern and cooler climate than they do here. Grapes will scarcely ripen where the apple is perfectly at home. The currant will not succeed well in this climate when planted on a southern exposure, but planted on a northern exposure it does well. It would be just as reasonable to say, because the grape needs to be planted on a south hill side, the currant also does, as to say because the grape does the apple does. The apple does not require the heat and sun that the grape does, as is proved by its succeeding so admirably at the North, where the quality of the fruit is better than here, and where the heat of the sun is not as great as here. I think the gentleman is more theoretical than practical in his views.

Mr. Mason—I am accused of being theoretical. It may be so, and yet my theory be a demonstration. Why, sir, it is a well known fact that peaches, pears, cherries, plums, etc., are of far better quality when raised by artificial heat than when grown in the open air. It is heat they need, and the fact that they are better when raised in a hot house is demonstrative of my position.

Mr. Coleman—I am astonished to hear the position taken by the gentleman. He believes that puny man can rival and surpass the Almighty in ripening and giving quality to fruit. I admit that this may be true with tropical fruits, or with fruits not adapted to our climate. But such fruits as peaches, pears, cherries and plums, attain a perfection in the open air which no artificial heat



or skill can give them. Such fruits are adapted to our climate and they need the warm sunshine, the showers and dews of heaven, the pure atmosphere, to give that rich, luscious, sugary, inexpressible quality, that delightful aroma, to them, which they possess, and of which they are deficient when raised by artificial means.

Mr. Mason—I shall take occasion at some future time to substantiate my position upon authority equally good with that of the gentleman last upon the floor.

Dr. Matthews—I cannot speak from personal experience, but know that Mr. Rivers, the famous grower of fruit by artificial heat in England, says that the fruit grown in hot houses is not of so high and fine a flavor as that ripened in the open air, and he is considered standard authority upon the subject.

Mr. Kelly—When you shade trees by boards or otherwise, as is sometimes recommended, it is too artificial a protection for their well being, but keep the trees well pruned down, so as to shade themselves, and you will grow plenty of good fruit on any slope. I would as soon plant trees on a southern slope as any other.

Mr. Spencer Smith—I have observed in Vermont that the best apple orchards were on a slope covered by a hill on the western side.

Mr. Colman said that he took issue decidedly with Mr. Kelly about planting orchards on a southern slope. The sap in the trees on this slope is started too early in spring, as before stated. They shielded from the cold, and the sap is easily excited by the warm sunshine. They should be exposed to the cold. The more they are exposed the better. If protected, and severe cold weather reaches them, they are destroyed. Mr. Husmann, of Hermann, has trees on a southern slope killed on account of being protected from the north, while those trees of the same varieties exposed to the cold are healthy. He says putting trees in protected places, is like keeping children in warm houses and then suddenly turning them out of doors in the cold naked. The sap of the apple is not as easily started as of the peach and some other fruits, yet it is affected in early spring by the sunshine on southern slopes when it would not have been on northern.

Mr. Kelly—I did not advocate southern slope for crop, but for quality.

Mr. Mudd—The application of slopes has been too general. A man planting on a multiplicity of slopes, as many are obliged to do, should plant the variety adapted to each one of them. The Jeneton should be planted on a southern declivity, as it blooms late.

Mr. Bayley—I have eaten, recently, pears that were ripened by artificial heats, and instead of being of fine flavor, they are really insipid.

Mr. Carew Sanders contended that fruit could not be ripened without the solar rays, and in mid-winter they could not be had sufficiently strong to perfect fruit. It was impossible to effect by artificial heat, in any latitude, or any country, a perfect flavor, but by combining artificial heat and the solar rays, fruit of as good if not better flavor could be produced.

Mr. Mason—I have not advocated artificial heat alone by any remark of mine to-day, but only as an auxiliary.

Dr. Matthews—Mr. Rivers advises the ventilation of hot houses that their contents may breathe, and adds that they should at an early period be removed to the open air so as to give them a better quality and higher flavor.

On motion, the meeting adjourned one week.

WM. W. WHEELER,  
Secretary.

—Doctors continue to disagree in regard to the aspect of the orchard, and doubtless will for some time to come, so long as latitude and elevation are elements of climatic value. In the latitude of St. Louis, which corresponds with that of Centralia, northern and eastern slopes are of some value, though we have seen orchards that have a southern aspect prove quite as fruitful, but not in all cases. When a southern slope is protected by high hills or forest trees on the north and west we have found complaints of killing by frost, the buds starting too early. Low headed trees, such as those of Mr. Cœ, at Port Byron, will do much to ward off this danger, as the sun cannot so easily heat the ground under the trees, to start them prematurely, as the branches shade the ground, and thus retards the rising of the sap. The suggestion of Mr. Mudd that the Raules Janet would do well on a southern slope, on account of its late blooming, is doubtless of value. The Northern Spy is similar in its habits. Protection, elevation and soil have much to do in modifying the effect of the aspect of the orchard, and should be studied in every case. Ed.

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CHANGING SEEDS.—The Irish Agricultural Review says: The practice of changing seed is now recognized in many sections as essentially necessary to the production of a first rate crop. We all know that the practice of procuring seed potatoes from a distance—say 20 or 25 miles—and from different kinds of soil has a most marked influence on the product. While the *rationale* of this is not quite obvious, the fact is indisputable. The same result follows also in the management of corn, wheat, pumpkins, beans and garden seeds. Even where exchanges are made between farmers in the same neighborhood, and where there is no very marked difference in the geological or mineral characteristics of the soil in respective localities, the practice is conducive to improvement. Let those who have never tried the experiment do so—on a small scale at first—if they are at all skeptical, and mark the results, both as regards quantity and quality of crop.

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—The monument of the greatest should be but a bust and a name. If the name is insufficient to illustrate the bust, let both perish.

### Fruit Lands in Egypt.

Probably no part of North America has received an equal share of the attention and interest which have been bestowed upon the famous Fruit Belt of Southern Illinois during the last four years. Pomologists are deeply interested in spite of themselves. The chain of miniature mountains that runs across this peninsula is heavily wooded with a dense growth of oak, poplar and hickory, and the surface of the country is very rough and broken; but the vegetable wonders that grow upon its lofty table lands and its fertile slopes pay the traveler a hundred fold for a few days' sojourn among its hospitable people. In no part of North America, perhaps, has the peach attained so high perfection in the short space of time in which choice varieties have been cultivated, as in this.

The climate is a happy blending of the tropical with the north temperate. The valleys furnish excellent pasturage, the slopes grow the best quality of cane, upland cotton, apples, pears, grapes and vegetables, while the tops of the hills are the crowning glory of Egypt. Here the peach, almond and apricot grow to their utmost perfection, entirely exempt from the frosts of the valleys which nip the fruit buds of these tender varieties farther north.

During the latter part of December while stopping a few days in this mountainous region, we noticed strawberries and chrysanthemums still in full bloom in the open air, and in places open to the south, swarms of insects were sporting in the warm rays of the sun. It seemed so strange to hear the murmur of insect wings, and see flowers open to the sun, when two days before we had breathed an atmosphere whose temperature denoted 15° below zero on the banks of Lake Michigan, whose waters, tossed by the bitter wind into the air, fell back in showers of ice-jewels.

We learn, however, that more snow has fallen in the fruit region this winter than has been known before for many years, and the Egyptians are enjoying it to the best advantage—the boys in riding down hill on their hand-sleds, and the older people in more dignified sleigh rides. Such visitations of snow are like “angels’ visits, few and far between.”

This mountainous country was opened to settlement and made available as a fruit growing region by the Illinois Central Railroad, to which it owes everything that makes fruit culture desirable. The railway plunges into these mountain solitudes soon after leaving Carbondale, going south, climbs an up-grade which culminates at or near Cobden in Union county, and then descends toward Cairo and the land of Dixie. Cobden is called by the inhabitants, The Pass. The name of its post office is South Pass.

Fruit lands in this neighborhood are being rapidly taken up and improved by enterprising and intelligent men. To illustrate the high value placed upon them we may be allowed to copy from a private letter in which the writer says: “All the land is being bought about here. The Hartline farm by a man from Cincinnati, and the Clemons farm by a man from Watertown, N. Y. And I have just heard that Col. Bainbridge has sold his place for ten thousand dollars to a Mr.

Evans from Makanda,” the first station this side, and equally good for fruit—“who has sold his place, one mile from the station, for fourteen thousand and five hundred dollars. Evans is a good man—one of the right kind.” Of course he is, or “any other man,” who brings like intellect and capital to bear in propagating fine fruits in one of the finest fruit growing regions in the world. An officer in the U. S. Army formerly of this city, lately left here with his family to purchase a fruit farm in the neighborhood. He intends, after threshing out the rebels, to retire to his Egyptian paradise, sit under his own vine and fig tree, and live on peaches and poetry the rest of his life. His sword will make a splendid pruning knife. Such may be deemed truly,

“A consummation  
Devoutly to be wished.”

[*Farmer's Advocate, Chicago.*]

[From the Chicago Tribune.]

### Saltpeter Caves—What has become of them?—The Palma Christa, or Castor Bean—The History of its Culture in this State—Suggestions in Relation to its Value.

CHAMPAIGN, ILLS., Feb. 7, 1862.

AN OLD LAW STILL IN FORCE.

In Gale's statutes, page 623, is “An Act to provide for the enclosing and guarding of Saltpeter Caves in this State”:

“SEC. 1. That all persons working saltpeter caves in this State, for the purpose of manufacturing saltpeter, shall, previous to commencing the manufacture of saltpeter, enclose said cave with a good and lawful fence, and keep the same at all times in good repair, so as to prevent cattle and other stock from gaining access thereto.

“SEC. 2. All persons working saltpeter caves in this State, and not first complying with the first section of this act may be fined in any sum not exceeding fifty dollars, to be recovered before any Justice of the Peace of the county in which the offence may be committed, upon complaint made by any person in the name of the County Commissioners' Court of said county, one half to the person suing therefor, the other to the County Commissioners' Court of the proper county, and may be liable for all damage which individuals may sustain by reason of their stock gaining access to saltpeter caves or manufactories. Approved Feb. 5, 1835.”

The above law has been brought down in the present statutes, and would lead one to suppose that there are in this State extensive caves of saltpeter. We have been a resident of the State within less than a year of the passage of the above act, have been in most parts of it, but have never had the pleasure of seeing one of these caves, nor do we know more of their existence than is contained in the above law.

If there are no caves of this character in the State, we are at a loss to account for the law, unless some son of Kentucky was ambitious to engraft into our code a portion of the law of his native State. There may be saltpeter caves in the south part of the State, for aught we know. If so, will not some of the "oldest inhabitants" inform us in regard to the matter?

If there are such caves, now is the time to work them to advantage, and the farmers upon whose lands they are situated, should at once enter upon their enclosure with the view of making them useful. On the other hand, if they as we suspect, are a myth, let the statute be purged of the absurdity.

#### CASTOR BEANS.

There is a general impression that castor oil is only used in medicine as physic, but this is not the case, as it is used for other purposes. Four parts of castor oil and one of spirits of turpentine was extensively used in place of sperm oil, twenty years ago, in North Carolina, according to the *North Carolina Farmer's Advocate* of 1841. "That it burns perfectly free from smoke, or the least degree of offensive smell, emits a clear and powerful light, and never congeals in the coldest weather. The preparation should be used with great care, for it is as inflammable as gunpowder, and explosions often occur by bringing a flame so near as to ignite the gas. The wick should be passed through long tubes, and in no instance should a lamp be filled when lighted."

Its dangerous properties when mixed with turpentine may have been the means of its discontinuance, though we suspect little was gained by substituting fluid and camphene in its place.

Since 1844 the culture of the castor bean has been gradually losing ground, and of late years has attracted but little attention. A house in St. Louis offers to pay a dollar and a half a bushel for the seed, to be sold to farmers for planting, and are urging an increased culture; to this end they also offer a premium of twenty-five dollars for the best article on the culture of the castor bean.

Flax seed has also taken an upward turn. Whether this is due to the new tariff or some other cause, we know not. Castor oil is one of the best oils for leather, making it soft, pliable and water-proof, and can be used for many purposes in the laboratory. It is one of the most inodorous of oils; hence, valuable for many purposes. Unless there is some foreign demand we would suppose the business can be easily overdone, but at present we propose to consider the question as a matter of fact.

#### PRICE OF BEANS.

There is no crop that has brought so steady a price, for the past thirty years, as that of the castor bean. When the price for a short time went down to fifty and sixty cents, the planters refused to put in new crops, and the consequence was, they soon came up to the old price, a dollar a bushel, at which price they have remained with little variation until now, when those interested in the manufacture of oil are busy pushing the new planting into a broader space, and the price is one dollar and a half. So far as we are advised, Cincinnati, St. Louis and Alton are the only points in the Northwest that have mills for manufacturing, and that the culture of this plant has generally been within wagon distance of the mills. The supply since the advent of railroads has been too small, and the demand so dull, that no advantage has been taken of it. The crop is unprofitable, as we will show when we come to the culture of the plant. From what we can learn, no satisfactory attempts to grow the castor bean have been made north of Madison county, and that Madison, Randolph and St. Clair counties have furnished the main supply for the St. Louis and Alton oil mills. The Alton mill was not in operation until 1841. In 1848 the culture was extended to Macoupin county, and a mill put up at Bunker Hill. At that date beans were worth \$1 30 a bushel, and the oil sold in New York at \$1 50 to \$1 75 per gallon. A bushel of beans will make on the average one and three-fourths gallons of oil, depending on the manner in which they are dried and pressed, varying from one to two and a half gallons. Two qualities of oil are made, being first and second pressings. We also hear of cold pressed oil, but the cold is only the first pressing, as the seeds must be first hulled, or the dirt rubbed from them in an iron mill, and then heated in a large oven as hot as possible, without burning them, when they are submitted to an immense pressure. A peck only is pressed at one time, and that with a screw six inches in diameter. It will thus be seen that the idea of cold pressed oil is out of the question. After pressing, the oil is clarified by boiling, giving another contradiction to cold pressed oil. A second grinding and heating follows, when the hot pressed oil makes its appearance.

In 1850 a mill was built at Louisville, Ky., and the farmers near Shawneetown induced to try their hand. Speculation ran the seed up to two dollars a bushel for planting, but the crop sold at fifty to sixty cents, and no further efforts made to cultivate them.

## SOIL AND CLIMATE.

It is generally supposed that the range of country in which this plant can be cultivated is limited to a few counties in Southern Illinois, such as Macoupin, Madison, Randolph, etc., with a few locations in Missouri, and along the Ohio river. In this view we have no faith, for it is certain that in all parts of the State the plant will mature, and even as far north as Oswego county, in the State of New York, we have seen it in the gardens as an ornamental plant, mature its seeds and never heard any complaint on that account. At the same time, it is probable that it is a more profitable crop in the deep rich loam and warm climate of the districts named than further north.

## ITS CULTURE.

The land should be a deep rich soil, deeply and thoroughly plowed, and have the surface firmly pulverized, for it must not be forgotten that the plant in its normal condition is semi-tropical, and like its congeners sorghum and cotton, is delicate in the first stages of its growth, though exceedingly rampant in its second and later stages. The first plants begin to break ground in about two weeks, and it will be fully four weeks before all the plants will be up, unless the seeds have been soaked in warm water three or four days, which will tend to bring the crop forward some days. The seed is enclosed in a hard shell, which accounts for the tardy appearance of the plants above ground so long after planting. In planting, the rows are marked off four feet apart, both ways, with every fifth row six feet wide for the purpose of harvesting with a one-horse cart or sled. Four beans are put in a hill, though sometimes more are used to supply the demand of the cut worm, which sometimes seriously injures the crop. Some planters leave two and others one plant in a hill at the second hoeing. Both have their advocates, though it is probable that in rich land and good seasons the one plant system is the best. The culture is similar to that of corn, with the addition of thinning out the plants and weeding out the grass with a hoe.—The plant is of rampant growth after it once gets started; often a whole field will average six feet, with many plants eight feet high.

## HARVESTING.

Here is where the "gazelle" comes, in and upon which depends the profit of the crop. The beans begin to ripen from the middle of August to the first of September, and if not gathered as they ripen, they "pop out" and are lost. This is the main point to guard against, hence the ne-

cessity to harvest them as they mature, and this occurs gradually, that is, from the time above stated to that of the final cutting down by frost, for the first frost puts a stop to further ripening in the most summary manner. The beans do not grow singly but in clusters, resembling small cones, and are contained from three to eight in a burr or outer shell which form these clusters.—In harvesting, the first thing to be done is to prepare a

## POPPING GROUND.

To do this, a space is cleared off and swept, of from fifty to two hundred feet in diameter, depending upon the amount of the crop. The crop is harvested by passing a one-horse cart or more commonly a sled, through the fifth row, on which is a box holding about eight bushels, the cones of ripe berries are cut off and placed in the box, hauled to the popping ground and spread out near the center, when they are exposed to the sun, which in drying shrinks the outer husk and the beans pop out with a sharp report, often to the distance of forty feet. During a warm day the mimic battery of beans keep up a continuous firing. It will thus be seen that if the beans are left on the stalk until fully ripe they would pop out and be lost. It is therefore of the first importance that crop gathering be attended to in a very prompt manner. The harvesting begins about the middle of August and lasts until the first frost puts a stop to the operation. At first the labor is not hard nor difficult, but after a few days the ripening rapidly advances and there is a slight hurrying up of the work.

The usual yield is fifteen bushels, though occasionally twenty-five are realized. The cost of harvesting is large, one hand can only harvest about four acres, or say sixty bushels in the season, which is from the middle of August to the middle of October. When the price is down to fifty cents it will be seen that it will scarcely pay for the expense of harvesting, and will account for the discontinuance of planting at that price. The owners of the oil mills, when there is an over crop, hold on to the oil, and thus keep up a fair average price; they know that it will not do to allow the price to go below the standard, that is one dollar the bushel. The amount of this oil used is limited to certain uses, and the mill owners in this county know within a few barrels the amount wanted to supply the market. No use is made of the oil cake or any other part of the crop. The dead plants are broken down with clubs and plowed under.

Under the present demand it would not be safe to largely increase the culture of this plant. Had it not been for the discovery of the oil wells a different result might have been reached.

#### THE CROP IS DANGEROUS TO STOCK.

The castor beans are sure death to stock when eaten by them, and to guard against damage in this respect, the Legislature passed an act, approved January 16, 1836, as follows, and which still remains in force :

"SEC. 1. That no person or persons shall hereafter be permitted to plant and cultivate castor beans, without securing the same with a good and sufficient fence, or fences, as is generally put up, and used for the protection of grain crops in the neighborhood.

"SEC. 2. That all persons violating this act shall be fined in the sum of twenty-five dollars, to be sued for, and recovered, by any person before a Justice of the Peace within the proper county in an action of debt, the one-half whereof shall go to the person so suing, the other half into the treasury of the county where such penalty is recovered ; nothing herein contained shall in anywise prejudice the owner or owners of animals which may be injured by the negligence of any of the persons aforesaid from recovering adequate damages for such injury."

In several respects the above law is peculiar, especially in regard to the kind of fence, but its animus is apparent to show that the castor bean is a dangerous crop, and must be subject to more strict public regulations than other crops. The provisions for division fences in this case is ignored, and the planter of castor beans must fence around the entire field. From what we can learn, not over fifty thousand bushels of castor beans have been grown in this State in any one year, and that about 1840 the quantity was greater than at any time since. Should there be a demand for the article, our farmers could soon send millions of bushels to market, but this under the existing state of the oil wells does not look very promising.

RURAL.

—From October 1st, 1861, to February 7th, 1862, there were imported into New York, from various British ports, chiefly Liverpool, seven million five hundred and forty eight thousand five hundred and twenty seven pounds of cotton, valued in the invoices at one million five hundred and fifty thousand one hundred and ninety-two dollars. This is at the average rates of about twenty and a half cents a pound.

—What's a collar-bone, Jim?" "Well," said Jim, thoughtfully, "I don't know, unless those stiff dickies has got bones in 'em; I guess dat's it."

#### Corn Culture—Drills vs. Hills.

The most common practice with the large corn-planters, is to lay off the hills, three feet nine inches each way, and to plant about four grains of corn at the intersection of these rows. To do this the whole field must first be plowed, harrowed and laid off before the planting can be done. We will suppose that a small farmer, with one team puts in forty acres of corn, the plowing will occupy at least twenty days, the harrowing four, laying off two more, making, including Sundays, over a month from the turning of the first furrow to the planting, and the planting will occupy about three days more. Of course the whole piece will be up and ready for working at the same time, while that first plowed will have a good start of weeds long before the corn is up, which will add much to the labor of cultivating. In some cases the field is divided and one-half plowed and planted before the remainder is entered upon. In this case, a part of the crop will be ready so soon as the last planting is through with, but in the case where it is all planted at one time the farmer will have to wait some days for the corn to be ready for working, which will give the weeds on that first plowed a fine start. In this way the planting is late, often too late to make a first rate crop. On the other hand it is charged that in drilling the rows but one way it is more difficult to work the crop and keep it clean of weeds. This would be true if the land was left for the weeds to get a good start, but if attended to in time is not the case.

#### DRILLING.

We will suppose that we commence plowing for corn the middle of April and continue to plow to the 25th, some fifteen acres would be ready, if the weather should prove favorable, one day would suffice to harrow it, and as it would need no laying off, one day's work is gained. The rows can be drilled in hills or along the row to suit the taste of the farmer, or according as the machine is adapted to either. Up to this point one day's work of a man and team is saved in the laying off, and one day of a man to work the machine to check-row the hills. This we can count worth at least three dollars, or a saving of nine dollars on forty-five acres, the usual amount for one hand. As this date is the earliest time that it will venture to plant, we may expect that it will be full large to work, by the close of planting. The remainder of the planting can be done at intervals of two or three days. In this way the seed is all planted in fresh plowed ground,



which all know is an advantage and will always insure a better stand, more especially if the land is rolled after planting, as it should always be. We will suppose that the planting is completed by the 20th of May, as it ought to be when the first fifteen acres are ready for working; thus no time is lost, nor will the weeds have got the start of the corn. The land having been rolled the corn can be worked some days sooner than otherwise, nor is there so much danger of covering it with the cultivator, as most of the clods are crushed by the roller, and of course in the condition of good friable soil.

Corn planted in freshly plowed land is not so liable to destruction by the cut-worm, the wire-worm and other insects as when planted in soil that has become settled and given time for the breeding of these pests of the farmer. Land thus freshly plowed is warmer, as its dark color when first turned up to the sun, absorbs its rays, and the seeds deposited at that time sprout sooner and grow with more vigor. Gardeners understand this, and are very careful to so arrange their work so as to deposite the seeds in the freshly stirred earth, and so important do they deem this that the planting is followed close on the preparation of the soil. It would be all the better to have each day's plowing planted the same day, and with the drill system we see nothing in the way of doing it. When the land is in good order harrowing is not always necessary before planting, if it is, as it always should be, followed with the roller. A couple of hours each day with the planter and roller will complete the work, going over a less surface, of course, but having the entire work completed beyond the contingency of heavy rains. It often occurs after a week's plowing of good weather that heavy rains fall that delays the planting for some days; in the meantime the weeds are busy sending up their shoots and filling the surface with their unpleasant presence, and on the return of good weather the field must be thoroughly harrowed to check their growth so as to allow of the safe planting of the seed. In all such cases much time is lost, for if the planting had been attended to daily, as the plowing progressed, the corn would be up ahead of the weeds, and the thorough harrowing needed to refit the ground would have answered for the first working of the crop, which would be so much gained. Last year we pursued this course with our corn crop, planting as fast as the ground was made ready, using a roller and planting very shallow. The result was one of the best possible stands of corn, by far the best that we have ever had under any circum-

stances. From necessity we used a common check row planter, dropping in hills, but by taking out the double drop the seed was considerably scattered in the row, and the hill of four to five plants usually occupied a foot of space. This year we shall use one of "Prindle's Drill Planters," that needs no other guide than the team—drops, covers and rolls the earth over the seed. It is also an admirable bean planter, probably the best. This is a cheap machine, as all single-dropping, non-check row machines should be, thus saving more than half in the cost of a planter. Farmers who put in large crops of corn will find it as much to their advantage to use this kind of planter as the small farmer. On the check row planter two persons must be hauled, making it hard work for a good span of horses, while with the drill a light team and boy can do the planting; we have known a boy to plant three hundred acres of broom corn in a season, which is equivalent to planting five hundred of corn.—Eight trains will do the plowing for one planter, to be followed with one team with the roller; the rolling is more than four times as valuable as the harrowing and cheaper done, with the exception of outlay for the roller, which will cost about \$50.

Another advantage in drilling is in the facility of working; the rows are much more straight, and will admit of working close up to them. In working with Turner's cultivator we found that the apparatus or guide for the hills was of no practical value, and made it fast to the machine as useless; this will tend to lessen the cost of all such implements.

To sum up the advantages of planting rows our way, we have—

1st. A saving of harrowing, marking off and the time of one man to do the check-rowing; the use of a lighter, cheaper and less complicated machine; less labor for the team, shallower planting; and added to this we see no objection to attaching it at once to the section iron field-roller, and thus at one operation plant and roll.

2nd. Planting the seed in the freshly plowed ground, thus insuring a better stand, a more vigorous growth, less danger from insects; no risk of delay from heavy rains after fitting the land, having the first planting ready for working on the completing of the planting, and the whole is ready in succession, enabling the farmer to take advantage of the work from the turning of the first furrow until the crop is laid by.

We hope the manufacturers of corn planters will be wise and keep up with the requirements of the age. The West can beat the world with cheap corn; but to do it we must have the most approved implements, and the best modes of culture will follow.



### More About Illinois Coffee.

Since writing to notice of the above named coffee, grown by Mr. Huffman, of Effingham, we have received from him specimens of the berries. They in size, color and form resemble the seed of the sweet orange. The berry itself is enveloped in a thin, hard skin, which is nearly of a pure white, and has a wrinkled or rough appearance, much like other members of the Leguminous family to which it belongs. The seeds are two bodled, like the bean, and easily separated by splitting; hence, the supposed similarity to coffee that deceived our friend, the Hon. S. W. Moulton. The size being that of a large pea, the flesh is of a bright golden yellow, is hard, and in its raw state, has a decided pea taste, and we should consider it as destitute of any of the real properties of coffee as that of the common field pea that is so commonly used to adulterate the pure berry. Mr. H. having the kindness to send us just fifty seed for one dollar, we cannot give it a trial in the way of a cup of coffee, as we have sent samples to an eminent botanist to see if he can make out the plant. Thus it will be seen that we are unable to settle the most important point in regard to its value, to-wit: "will it make a cup of genuine coffee, equal to the best Rio?" It is neither the *Ok a* or *Japan Pea*, but a legitimate member of the pea family, and will doubtless prove as valuable for coffee as any of its congeners. Mr. Huffman is a patriot, and, withal, a shrewd genius, and goes upon the broad principle of "helping others to help himself." He sells fifty seed for a dollar, providing that two red stamps are sent to prepay the postage, showing a precision in the seed business seldom attained.

Mr. Huffman has very kindly answered several of our enquiries in regard to its habits and culture, and promises to give us instructions as to its use, but he says that "he cannot afford to put up less than a dollar's worth of the seeds, as the writing and mailing of it would be too much for a less amount." We would not, therefore, advise any one to trouble Mr. H. with less than that sum, as it would only be an annoyance to him. On the whole, the price is exceedingly reasonable. Seventy-two of the berries will weigh an ounce, which, at two cents each, makes one dollar and forty-four cents, or at the rate of twenty-three dollars a pound, and as beans and peas usually weigh sixty pounds to the bushel, the snug little sum of \$138 the bushel. Now, as Mr. H. had only some two bushel of the ber-

ries, and is thus patriotically distributing them broadcast over the land, we feel as though

#### THE WEST HAS BEEN CHEATED

out of a grand chance to become famous, and the interests of Mr. H. has been sacrificed by a premature publication of the great virtues of this invaluable discovery of a domestic coffee. Mr. H. should have waited another year, when his two bushels would have yielded three hundred fold, and his two bushels would have yielded a princely fortune. Besides this, the fame that would have attached to the State is partially lost, and the opportunity of paying off our eastern friends for such acts of kindness as giving us China tree corn at a cent a grain, *Morus Multicaulis* at five dollars a plant, Roban potatoes at twenty-five cents each, Charter Oak grapes at three dollars, Chinese Battatas, six seeds from the axils of the leaves, at five dollars, with numerous smaller favors equally valuable. Had not Mr. H. given our friend, the Hon. S. W. Moulton, of Shelby county, the berries to test in the way of coffee, had Mr. M. not conceived the idea that it was nearly equal to the Rio, had he not been at Springfield at the meeting of the Executive Board of the State Agricultural Society, they would not have offered the one hundred dollar premium, nor would the modest correspondent of the *Tribune* have advised the world of the exhibition of this invaluable plant, and the next crop could have been sent out in such a quantity as to have produced great results. Now the plant will be in so many hands that it cannot be available, and thus our great opportunity is lost.

We have been patiently waiting for years for something of the kind to turn up, with which to return such valuable favors to our ingenious eastern horticulturists, but alas, "the best laid schemes of mice and men gang aft a-glee." Crandall with his "Egyptian corn" made a faint effort in that line, but he lacked either tact or energy, and but a few hundred dollars was the bare results, without any particular advantage to the State, as having developed a great genius, that she might place on the roll of fame, beside the worthies who have from time to time sent us out such horticultural wonders.

#### ITS CULTURE.

Plant in good deep soil, prepared as for corn in drills, four feet rows, and plant in a hill, eighteen inches apart in the rows; cultivate same as corn, and thresh the same as beans. The plant grows about two feet high, and has a habit

resembling the Japan Pea; from one to two peas in a pod, generally two, never more, blossoms white, can be grown by sowing broadcast on clean land or in drills, eighteen inches apart.

The common field pea not being adapted to our climate, it has been an object to ascertain if some other members of the family would not answer the same purpose, but thus far without success. The Japan Pea had a large run, and those who had the seed for sale were for a time lavish in its praise, but it has thus far proved of no value. Aside from the thick skin on this pea, it gives greater promise of being valuable than that of the Japan, to which it is so closely allied in habit and foliage. We would discourage no one in the trial of new plants, but hereafter we shall be careful about setting forth the virtues of any new plant upon the authority of any person, however high in his profession or honest in his motives, unless he is also a practical horticulturist, and knows whereof of what he speaks.

### Improvement of Vegetables.

There is no vegetable now cultivated which is not susceptible of almost indefinite improvement. Yet we see very little difference between the crops produced now, and the crops raised by our forefathers. Indian corn, beans, pumpkins, squashes are the same, identically, as we were accustomed to see in our fathers' fields and gardens forty years ago, except that, in some instances, there is an obvious deterioration as regards both size and quality. This is the plain result of carelessness—a sin to which most cultivators will, we fear, be compelled to plead guilty, and of which they are annually, although some seem not to be aware of it, experiencing the fatal effects. The power of art over nature has already been most forcibly exemplified in the vegetable kingdom, and with reference to some of the very productions which in this enlightened age we are permitted to “run out.” By carefully studying the habits and modes of nutrition and growth covered by the various products of the soil, and by selecting annually the best, most perfectly developed, and vast products of the field and garden, we may in a very brief period so modify and change them, as almost to remove them from their respective classes. The fine specimens of Indian corn which we see at our agricultural exhibitions have all been improved in this way.

The earliest potato we know of is the Ash-leaved Kidney. It is small, white, and of a very perfect kidney shape, uniform in size and form. In quality it is very good, the best of the very early potatoes. In ordinary seasons, this potato will be fit to eat the latter part of June or beginning of July, and will be entirely ripe by the middle of the latter month, if the soil is not too rich or too moist, when it will keep green a little later. Next to this in earliness, is the Early June, a small, white, round potato, skin a little

russety, but smooth. There are several varieties called by the same name, but when growing, the true Early June can be distinguished by its glossy leaves, that looks as though they had been varnished. In quality this is hardly as good as the Ash-leaved Kidney, but is a little more productive, and is a fair potato for an early variety. Neither of these yields enough to pay for growing by farmers, except for family use, or where they can be sold for a high price—say a dollar a bushel—in some neighboring city.

Next to the above, and very good for a succession, is the mountain June, a large, white potato, yielding well, but not of the best quality, though far from being a bad potato for the season, especially when grown on dry land. The Buckeye ripens about the same time as the Mountain June, and is a large potato, giving an excellent crop. When grown on dry and rather poor ground it is very good, but on soil that is rather rich or moist, it grows too large, becomes hollow and somewhat watery.—*Rural New Yorker*.

—In our next we intend to fully discuss the subject of varieties and culture of the potato. The failure of the potato crop occurs too often in this State for profit, and for some years we have suspected that the fault was more in not adapting our mode of culture to the soil and climate of the State than to any other cause.

### The Missouri State Horticultural Society.

This Society closed its labors after a session of four days. In addition to the list of apples and peaches already published, they agreed to recommend the following fruits:

#### PEARS—SUMMER.

For General Cultivation—Bartlett, for market and family.  
Promising Well—Doyenne d'Ete, dwarf, for market and family.  
Madaline, dwarf, for market and family.  
Tyson, dwarf, “ “ “

#### FALL PEARS.

For General Cultivation Louise Bon de Jersey, dwarf, market and family.  
Belle Lucrative, dwarf, market and family.  
White Doyenne, “ “ “  
Seckle, “ “ “  
Dutchess d'Angouleme, dwarf, market and family.  
Promise Well—Flemish Beauty, dwarf, market and family.  
Beurre de Brighais or Des Nonnes, dwarf, market, and family.  
Beurre Rose, standard only, market and family.  
Grey Doyenne, dwarf, market and family.

#### WINTER PEARS.

General Cultivation—Glout Morceau, dwarf, market and family.

Winter Nellis, dwarf, market and family.  
 Promise Well—Beurre d'Aremberg, dwarf, market and family.  
 Vicar of Wakefield, dwarf, market and family.

## STRAWBERRIES.

General Cultivation—Wilson's Albany, market.  
 Macavoy's Superior, home market and family.  
 Longworth's Prolific, market and family.  
 Monroe Scarlet, Market and family.  
 Promise Well—Cremont's Perpetual or Imperial,  
 (a local name), market and family.

## RASPBERRIES.

Promise Well—American Purple and Purple  
 Cane, family.  
 Ohio Everbearing, home, market and family.  
 American Native Black Cap, market and family.

## BLACKBERRIES.

For General Cultivation—Lawton, market and family.

It was on motion,

*Resolved*, That inasmuch as many experiments are being made to test the different varieties of the grape, this Society will not at this annual meeting recommend a list of grapes for general cultivation—*St. Louis Democrat*.

—The above will be of value to our Egyptian readers, as combining the experience of their Missouri neighbors with soil and climate similar to their own. ED.

## The Peach crop in central Illinois.

At this writing, (February 22d) the peach buds are badly injured. For some days preceding the 14th inst., the weather was warm and thawy. That day we were at Quincy on the Mississippi river; the streets were muddy, and the snow slush made them particularly disagreeable. Soon after we left on the 4 p. m. train for home, the wind suddenly veered to the north, and before midnight the cold was intense, sending the mercury at least ten degrees below zero. The result is a wide gap in the next peach crop. Upon examining the buds in our own grounds this morning, we find but few sound ones on the bud varieties, while on some of the seedlings a tolerable supply remains. As the cold was less intense in this section than further west, we judge that the peach crop is nearly ruined in the central part of the State.

Our trees sheltered from the severe wind that prevailed on that night are less injured than others, and also on the southeast side of the trees, there is a show of live buds.

—Small faults, indulged, are thieves to let in greater.

From the Chicago Farmer's Advocate.

## Sorghum.

Seeing an article from your Beloit correspondent complaining of the price of crude sorghum sirup, viz: 35 cents a gallon. I propose to give the expenses of raising the cane and preparing it for manufacture. But if I prove that it can be made a paying crop at present prices, I do not see as it will affect Mr. C., as he claims his home market as 15 cents higher than Chicago. Unfortunately we have no such home demand here in Central Illinois, but we think if the price will remain stationary in Chicago, we can make it pay even here, as facts and figures are what we want:

Rent of an acre of land . . . .	\$3 00
Plowing . . . . .	1 00
Marking off and dropping seed . . . .	75
Harrowing in . . . . .	40
Cultivating . . . . .	1 00
Stripping and topping . . . . .	5 00
Cutting and hauling one mile . . . .	4 00

Total cost per acre . . . . .	\$15 00
He gives $\frac{1}{2}$ for manufacturing, and allowing 160 gallons per acre, it leaves the producer 80 gallons . . . . .	80)15,00

	18 $\frac{3}{4}$ c.
Barrels and freight to Chicago . . . .	5

Total cost per gallon . . . . .	23 $\frac{3}{4}$ c.
Market price . . . . .	35

Total profit per gallon . . . . .	11 $\frac{1}{4}$ c.
Gallons to the acres above . . . . .	80

Total profit per acre . . . . .	\$9 00
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It is generally considered to be more profitable to raise the cane and buy the mills and manufacture the sirup than to get it worked up on the shares. This will give a greater profit than the figures will show.

At these figures it will pay better than anything farmers can raise, and if the refiners can take all that is raised, we may consider that this branch of industry as one of the leading staples of our State. It will also help to curtail the vast amount of grain raised, and help to bring the price up to living figures. I should like to see the experience of others on this subject, and would suggest that they give the names of their post office, county and State, as the circulation of the *Advocate* over so many degrees of latitude, and what may be applicable to one place is not to another. C. N. MILES.

*Galva, Henry Co., Ills. Feb. 1862.*

—Jones lost his wife, and his friend Brown, in the same sorrow, calling to condole with him, to his surprise found him sitting with his feet on the fender and cozily smoking a cigar. Jones saw his surprise, and mournfully remarked, glancing at his friend's hat—"It's a hard case, Brown. You seem to take your consolation out of one kind of weed, and I out of another."

## The State Sorghum Convention.---In Session at Joliet.

The State Convention of Sorghum growers and manufacturers was held at Joliet on the 12th inst., pursuant to a call made by a committee appointed for that purpose. There was a handsome attendance, and much interest manifested in the proceedings.

### ORGANIZATION.

The Convention was organized by the choice of Dr. Ira Knapp, of Channahon, as President, and Lyman Meacham, of DuPage, as Secretary.

### BEST METHOD OF SAVING SEED.

Mr. Meacham, of DuPage, stated that he has raised the cane for four years. He cuts the tops off some 12 or 15 inches, and lays them in the sun, or where the air will have free access; they must not be allowed to mold. He has had no trouble with his seed, if treated in this manner.

Mr. Knapp considered it as easy to save sorghum as broom corn seed, and advised the use of the same means as the preceding speaker.

Mr. Shoemaker goes through the field, and selects the ripest seed, adopting the same general method of curing as that of the last speaker.

Mr. Brandon had had some trouble in saving seed. He first saved it in too large bunches, and he found that in the centre of the bundle the seed was moldy and did not come up. He advised that it be hung in small bunches where there was free access to the sun and air.

Mr. Reed had raised cane for four years, and saved seed for that time with uniform success. He cuts off the top of the cane, and spreads it on the field till it becomes wilted, then hangs it in bundles in the sun until it becomes perfectly dry, and then separates the seed from the stalk, and heads it up in a flour barrel. He has always succeeded in saving seed that is sure to come up. The seed is a hardy one, and is not affected by dew or rain; nothing but frost injures it.

Mr. Tate states that he cut the seed when black, and hung it up in the sun and air. The seed was fully ripe.

Mr. Reed said that a kind of green mold would sometimes, unaccountable, collect on it. When this was present the seed would not come up. A brown mold would not injure its vitality.

### DETERIORATION OF SEED.

Mr. Hale had discovered that the cane was deteriorated from the admixture of broom corn. His experience was that it would hybridize.

Mr. Reed thought that the seed would so far change as to lose its saccharine qualities. The deteriorated cane ripens earlier than the pure cane, although he does not consider this an evidence of deterioration. His experience was that hybridization would result from planting near broom corn. Planting near Indian corn did not affect the quality, neither did the coffee corn, as they were out of flower before the sorghum. He

advised the planting of the best seed, but thought that there was no necessity of importing seed from Algeria or elsewhere. Sorghum and imphee should not be allowed to mix, the result would be disastrous, where the mixture prevails, hybridation is effected—there is a great falling off in the quantity and quality of the product.

Da. Knapp planted the seed in a dozen hills five years since, and saved the seed, which planted an acre. He found in the field four or five stalks altogether different from the rest of the field; the stalk was tasteless, and entirely free from saccharine matter. He selected his seed from stalks standing far distant from that, and had had no deterioration of seed since.

### PREPARATION OF SEED FOR PLANTING.

Mr. Reed stated that he never soaked seed, or prepared it in any other manner. He only planted it and it came up readily.

Mr. Meacham soaked his seed in water and in chloride of lime, with gratifying results; he thought that it would hasten its germinating qualities, but found he was deceived.

Mr. Hill was opposed to soaking seed when the ground is warm and dry, or warm and wet; when cold and wet he would advise soaking; he believed whatever hastened the growth was desirable; one of his neighbors soaked his seed in copperas and chloride of lime with good results.

Mr. Shoemaker soaked his seed last year in warm water for three days, then planted, and in five days the corn was above ground from one end of the field to the other; his experience was that growers generally plant too deep; when he planted the seed dry he did not succeed so favorably.

Mr. Reed had planted seed two years old, and it germinated properly.

Mr. Hills had planted seed three years old, which came up well.

Mr. Young planted old and new seed, and found that, of the older, almost every kernel germinated.

[We think much of the difficulty with the want of a good stand is too deep planting; plant shallow and roll the land, and if the seed is good it will come up, but we know from experience that the best of seed deeply planted will not germinate.]

### PREPARATION OF SOIL.

Mr. Hills thought that everything depended upon the preparation of the soil; the roots extend deeply into the soil, and the ground should be finely comminuted, so that there shall be no obstruction to the passage.

Mr. Knapp had learned that the great trouble relative to the germination of the seed arose from the indifferent manner in which the soil was prepared; his experience was that the land should be deeply plowed six months in advance—the later in the fall the better, because the soil pulverizes more readily from the late plowing; and in the spring, as soon as the frost is out of the ground, he advised to cultivate and break up

with a harrow until every portion is finely comminuted; and also recommended that the seed should be planted one half to three-fourths of an inch deep.

Mr. Sly would also prefer fall plowing, and select land entirely free from weeds; he thought the crop would bear manuring, and said that thorough cultivation would hasten the crop two weeks—a most important consideration in his opinion; he recommended planting upon ground three years from the sod.

Mr. Shoemaker agreed generally with preceding speakers, but advised planting in rows four feet apart.

Mr. Meachman advised growers not to manure their land. His experience had taught him that, though the product is larger, the syrup, in all those essentials which go to make up a superior article, was vastly inferior.

Mr. Reed differed from the last gentleman, and advocated the use of stable manure, particularly on stiff clay soils, and thought the grain for adopting this course of procedure was equal to 30 per cent. The best syrup he had ever made was from a heavily manured clay soil, and he was decidedly in favor of it.

Mr. Brandon planted his seed on the 25th of May, upon a wide clover sod, just broken, and the syrup was unequaled. He attributed this result to vegetable manure caused by the decomposition of the sod.

#### TREATMENT AFTER PLANTING.

Mr. Bower gave the cane the same treatment as corn.

Mr. Baggs did the same.

Mr. Sly advocated thorough cultivation, and insisted that the cause of the numerous failures in the cultivation was the lack of thoroughness.

Mr. Knapp presented two specimens of syrup—one made from cane grown on rich manured soil, and the other on light soil, showing a decided superiority in favor of the latter in all desirable qualities.

Mr. Reed had found that, in clayey ground, the sprouted blade of the seed was sometimes unable to penetrate the crust; for instance, after a shower and a warm sun. In such cases he raked the surface of the hill, broke the crust, and the plant vegetated rapidly.

#### STRIPPING AND HARVESTING.

Mr. Reed uses a common lath, with which he strikes downwards, stripping the leaves from top to bottom with a single blow.

Mr. Foster uses two wooden swords, one in each hand.

Mr. Hill did not wish his cane stripped long before he manufactured. The cane might lay for months after it be cut, if it be not frosted, and the joints are not bruised. He binds the stalks in bundles, and piles it in such a manner that the air circulates freely throughout the entire mass.

Mr. Gates had a specimen of syrup in his possession, made from cane which had frozen and thawed, and he considered it the best sample he had seen.

Mr. Meacham advised all growers to keep their cane where it shall not be exposed to alternate thawing and freezing. It would sour and become worthless.

Mr. Hill said there was no virtue in cane tops, and advised growers to discard them and throw them away.

Mr. Reed thought differently. He had experimented with tops and butts, and he found that the notion that the saccharine matter was located in the butt of the stock was all fudge.

Mr. Brandon had succeeded in getting a good product from suckers.

Mr. Reed had found that the longer the cane can remain in bulk after harvesting, the better. It must be cut before frosting in the field; afterwards, no matter how much they frost, if it does not freeze and thaw, the better will be its condition.

#### MANUFACTURING.

Mr. Reed uses one of Gate's crushing mills, and finds that it does excellent service. He uses Cook's evaporator with general success. He boiled his juice with the fire, and with the care taken by him, considered his syrup as good as Belcher's. There is nothing peculiar in his process. He boils and skims until the syrup indicates 35 degrees by the saccharometer. In making sugar he used the lower stalks, expressed the juice, then added clear lime water, and after boiling a short time, infused a solution of nut-gall, tested and boiled; the nut gall in solution seizes upon all impurities, bringing them to the surface leaving the residue very clear; then filter through sand and charcoal, and boil down to 38 degrees, when granulation will commence. The molasses will separate from the crystals, and in a few days the operation is complete.

Mr. Luce manufactures the syrup by steam, and uses Gate's mill; raises the first scum with the escape steam of the boiler; after the scum is taken off, the syrup is drawn into an evaporator, and steam applied until it reaches the boiling point, when the scum is again removed; boils rapidly and skims till the density, as indicated by the saccharometer, is 33 degrees. After drawing off, he adds lime in the proportion of three ounces to twenty gallons of the syrup. The object of the lime is to prevent the accumulation of froth.

Mr. Meacham presented a sample of sugar of superior flavor, but inferior in color. The difficulty in the manufacture of sugar was, in his opinion, owing to the presence of gum, which, from experiments he had made, lay wholly in joints of the cane. The vegetable "twang" had its origin here also. In the specimens presented the joints were taken out. In good seasons and upon land not manured, the yield is large. Light sandy soils produce sugar more largely. He usually boils syrup to 36 degrees while hot, equally 40 degrees cold.

The discussion was here closed, leaving several points named by the committee untouched, and after examining the numerous specimens of sugar and syrup presented by the members, the convention adjourned *sine die*.



## SAMPLES OF SYRUP AND SUGAR.

At least a hundred different samples of syrup were presented, in various styles of granulation, some of them with just a murky tinge, indicating the presence in a slight degree of the crystal; the others being one-half, and in some instances even a larger proportion, in a granulated or crystalized condition. The Chicago Refinery exhibited a specimen of their plantation syrup, and a sample of unrefined sorghum grown in Loda, which had been submitted to chemical analysis, and found to contain 56 per cent. of sugar and 18 per cent. of grape sugar, the balance being gluten and water.

Of sugar the samples were numerous, satisfactorily demonstrating the fact that sugar can be produced from sorghum. The manner of arriving at this result was diversified. Each manufacturer arrived at the same end by pursuing a slightly different pathway. The specimens mostly admired were a sample of sugar from Bela Luce of Plainfield, Will county, consisting of crystals large and well defined, about a sixteenth of an inch in diameter, which when pulverized, equalled in favor the best loaf sugar; a sample from Keokuk, Iowa, equal to the best New Orleans product presented by the Refinery; a sample from P. W. Gates of Chicago, and another from Mr. Meacham of Du Page—the former resembling refined New Orleans sugar, and the latter bearing some likeness, both in color, consistency and flavor, to common domestic maple sugar.

## SORGHUM CIDER AND RUM.

A sample of cider, made by Rev. Royal Reed of Joliet, from the skimmings, was examined and favorably reported upon by the tasters; also an excellent sample of sorghum rum, distilled from the skimmings and washings of the boilers, which is a liquor 20 per cent. above proof, and it is said by physicians to be valuable for its medicinal qualities, its peculiar action being a diuretic.

## [Confiscated Correspondence.]

## Experiments and Acclimation.

I appreciate fully the chemical difficulty of making crystalized sugar from a new sugar plant, or even from one well known, when transferred to a new climate; and perhaps the more so from having been a student of chemistry under Dr. Hare of Philadelphia in my early days. Mr. Lovering has done much harm by his thoughtless saying that "it is as easy to make sugar from sorgho as to make a pot of mush, and easier than to make a kettle of apple butter."

Next to knowing what we *can* do is the knowledge of what we cannot do, in the present state of science on a given subject. And this applies to the raising of crops, as well as to their after manipulations for useful purposes. I was not aware that more than 12 per cent. of crystalized sugar has been produced from beet root syrup; which is about equal to the best results as yet produced from the sorgho. The southern cane produces I believe about 18 to 20 per cent.

The question of acclimating plants I am glad to see attracts just now much attention. To those who farm for profit, in our day of railroads and steam, the selection is practically narrowed to such plants as the farmer can profitably grow for household use, and for the market in which he sells, in competition with producers from other climates, in a constantly widening circle of competition.

And after the experience of over thirty years, I have very reluctantly come to the conclusion that in southern Ohio we cannot cultivate either potatoes, turnips or beets, cheaply enough for regular feed to our stock, or in competition with the crops above 42°; where the expense of freight to market is the same. Where there is a near market and high prices, they may be profitably cultivated for the table, in small patches with the certainty of frequent failures, but also with the advantage (except potatoes) of sending them fresh to market, and also the freight on such heavy and cheap articles.

This is not owing to a defect in our soil, for in some exceptional seasons very large crops of all those plants are produced with little care. Three years ago I raised 216 measured bushels of large blue potatoes from less than half an acre, besides a quantity (not measured, but not less than 15 bushels) of small potatoes. They were planted without manure, in hills 3½ feet apart, and were not hoed but cultivated exclusively with the shovel plow, from seed raised on an adjoining plot the year before, (not 18 bushels to the acre, which is an average for 3 years out of 4,) with the same treatment, but those seed potatoes not averaging more than half the size of a hen's egg. I have also raised, and so have my neighbors, sugar beets weighing (the largest) from 16 to 19 pounds, and very large crops to the acre, as exceptional crops, but for at least 3 years out of 4 all our care and labor were thrown away on the crops, or nearly so.

Some of these same men who have since migrated to Iowa and Wisconsin, say that with the same care they grow there large and regular crops of potatoes, beets, turnips, etc. As neither skill nor care nor a proper soil were wanting here, I have been compelled to the conclusion above stated that our climate in southern Ohio, (about 30°) does not admit of their profitable cultivation by any mode as yet known as field crops.

I see that you do not accept my views as to the laws which I believe govern these and most other crops. I have no right to ask you to do so, but merely that you will consider the matter worthy of investigation. Let me state the proposition in a more practical form.

"The plants cultivated in Ohio, in field and garden as food for men and animals, cannot be made by any means now known, to produce regular crops in North America east of Kansas, in the central and southern portion of the climatic region of their natural growth. But in some part of the northern portion of their climatic belt; sometimes quite near the northern limit, these same plants can be made with care and skill to produce large and comparatively regular crops."



The experience and observation of one man is little in solving so complicated a question. Arguments drawn from analogy are also inconclusive, except when supported by large and extensive practical tests. The census returns for 1840 and 1850 (1860 I have not seen) give the results as to potatoes and the meadow grasses, and they are conclusive so far as these and some other crops are concerned. See De Bow's Compendium, pp. 171 and 172, and compare as to crops of hay and potatoes the conveniently arranged states, Connecticut with Georgia, Maryland with Massachusetts, Michigan with Mississippi, New York with North Carolina, and Vermont with Virginia.

These crops, (hay and potatoes) so largely consumed in northern states, and costing so large a percentage to transport, would certainly be extensively cultivated there if they could be profitably grown. But the returns both of 1840 and 1850 show they are not. They have their compensations but always in crops of which their region is near the northern limit. Take cotton for example, a perennial in the tropics; where it would seem that the fortunate children of the sun have only to pick off the bolls from the trees and grow rich. Yet their crops cannot compare in quantity and quality, and especially in regularity, with that of the gulf states where the cotton is almost every year damaged more or less by the frost.

The same may be said of rice and sugar cane. Even maize, the vegetable proteus of eastern North America, with its wonderful adaptability to our various climates, (wherever there are a few *very* hot days,) is an uncertain crop below 34°, and the best and most regular crops are between 35 and 41°. In Europe I never saw even a *fair* crop of maize, the best being a small patch on the ruins of the palace of the Cessars of Rome, (Nero's golden house.) My letter is already too long to be read, so I will give you only one other instance and *quit*. I grow figs in my garden in the open air (both purple and yellow.) I own 8 small trees, and have regular crops of fine, ripe figs, gathering often for 6 weeks from half a gallon to half a bushel a day, with little care or trouble. Some of my neighbors, following my process, do the same. But after repeated trials we have all utterly failed to make the cranberry bush succeed, though planted in similar soil (evidenced by the original forest growth) and in similar situations to where as a surveyor, I have waded through miles of flourishing cranberry swamp, in that part of Ohio which lies north of latitude 41°.

I am satisfied we have not begun to find out the capabilities of our climate, but believe that we shall have to look rather to the eastern coast of the old continent, (China, Japan, etc.,) rather than to Europe for further accessions of plants and animals suitable to our climate, which like theirs is dry, and has great extremes of heat and cold; and to southern rather than to northern plants.

Yours, very truly,

JAS. T. WORTHINGTON.

Ellensmere Farm, Chillicothe.

(Field Notes.)

## Good on Newspaper Scriblers.

The executive committee of the State Agricultural Society has been in session in Springfield for some days past. At a sitting on the 10th inst., as reported in the *Chicago Journal*, the following action was had:

Mr. Holder, of Bloomington, introduced a resolution proposing that the executive committee commence the publication of a monthly agricultural periodical, to be called *The Journal of the Illinois State Agricultural Society*, with John P. Reynolds, corresponding secretary of the society, as its editor.

Capt. Wait, the venerable and excellent member from Egypt, spoke warmly in its favor, urging that the society ought to adopt some measure by which it could be "independent of the newspaper scriblers all over the country."

Without questioning the propriety of the Agricultural Society establishing an organ, in opposition to the three excellent agricultural papers now published in the state, we would suggest to the "venerable member from Egypt," that the society had better eschew "sod corn" than attempt to make themselves "independent of newspaper scriblers," for the feat is easier of accomplishment.

The Agricultural Society, as well as the state of Illinois, owes the success it has attained, to the persistent efforts of these "scriblers." And "Egypt" too, the home of the "venerable" Capt. Wait, is under vast obligations to the same source for the advantages they now possess. Had this power been extinct, what, we ask, would have been the condition of "Egypt" to day? The same disadvantages under which she labored thirty years ago, would have clung to her yet.

Newspaper "scriblers" was the motive power which caused our state to be gridironed by the iron artery, which throbs and pulsates the whole length and breadth of the land, and sends commerce and intelligence, with lightening speed to every accessible point within her borders.

In ignoring "newspaper scriblers" the society proposes to install its corresponding secretary into the editorial chair. The selection doubtless is a good one, and we very much doubt that he is disposed to underrate the services of the "scriblers" of old Marion county, his former residence, in behalf of the society, nor the unwearied efforts of his village paper, the *Salem Advocate*, in furthering the agricultural interests of that portion of the state.

The press of the state has made the agricultural society a prominent institution; in its infancy they nursed it; in its adversity they administered consolation to it; and, now, when this same power has brought the society safely through the "filth and mire of Brighton," where its managers had "swamped it," it comes with ill grace for them to talk about becoming "independent of newspaper scriblers." Of a truth, the "venerable Capt. Wait" must be a fossil of fossils.—(*Waukegan Gazette*.)

—It is better to prevent a quarrel before hand than to revenge it afterward.

## Pruning Trees.

### SELECTED.

The advantage of spring pruning is, that it is a time of leisure with the farmer. The labors of the farmer, at least it March and April, are not pressing him as at some other seasons. The disadvantages are, that the sap is in full circulation up the tree. The tree, in all its parts, is filled with sap, and the wood at the wound cannot season. Hence the wood becomes corruptible and readily decays. Any persons who should cut timber at this season, especially hard wood, and expect it would season with the bark on and become enduring, would be considered out of his senses. The sap vessels are open and will not close. The sap will flow out and run down the tree. The bark will become calkered, turn black and cleave from the wood. A wound that can never heal will surely be the result. The sap being in brisk circulation up the tree, or waiting to be received by the leaf, and finding itself cut off in its communication, will resort to the recuperative principle common throughout nature, and will throw out innumerable suckers. In many instances these are suffered to grow, to the great injury, if not destruction of the tree. The tree is destitute of foliage, and the pruner is not quick to note the limbs which should be removed on account of feebleness and decay.

### SUMMER PRUNING—ADVANTAGES.

The sap has now ascended the tree, has passed into the leaves, and has been by them elaborated. It is descending between the wood and the bark, or in the inner bark, for the formation of fruit and the growth of a new grain of wood. The sap is appropriated, and nature is not prepared for the recuperative process, and throws out but few, if any shoots. The elaborated sap, being in active operation, may be seen in a few hours oozing from between the bark and wood, ready to commence the healing process.

It commences quickly and progresses rapidly. When the tree is in full verdure, the farmer may readily observe which of the limbs are diseased and require amputation. He can the more readily see what part of the top should be removed, in order to admit the fructifying influences of heat and light. The pruning is very beneficial to the remaining fruit. It causes it to hold, to grow larger and fairer, and to ripen more perfectly.

### DISADVANTAGES.

Farmers are very busily engaged in other farm operations. The bark which is then tender and yielding, may be injured by the heel of the careless pruner's foot. The sun's more vertical rays may be let in upon tender limbs, in which case they become sun-scalded at those points where the sun's rays fall at right angles from noon until two o'clock; the wound may not season as readily and become as incorruptible as at fall and winter pruning.

### WINTER AND FALL PRUNING—ADVANTAGES.

The sap has become quiescent. It has passed up the trunk and limbs, has been elaborated by the leaves; has returned down the limbs, trunk and roots for the production of fruit, and the formation of a new growth of wood. The wood readily seasons and becomes hard, firm and incorruptible. It will seldom rot, although large defective limbs are amputated. The sap vessels consequently become closed, and the sap the next spring will not be so forced in that direction as to throw out so many shoots; as though pruned in the spring, neither can the sap flow from the wound. The operation can be performed without liability of injury to the bark. The farmer has leisure; most of his farm operations have ceased necessarily. There is, therefore, time to perform this long neglected service.

### DISADVANTAGES.

The operator cannot so quickly determine the points to be attacked, to dislodge the defective limbs, and to open the top judiciously. The only serious objection to pruning now is, the orchardist does not know, consider, and appreciate the very great advantage and necessity of pruning.

If the reader has followed the article as closely as the importance of the subject demands, he will now be prepared to strike a balance in favor of summer against spring pruning; and a large balance in favor of fall and winter pruning.

We have, for many years, noticed the deleterious effects of spring pruning, arising from a flow of sap, and the multifarious production of suckers. We do not mean to say that, as a whole, an orchard had not better be pruned in the spring than never to be pruned. Much depends upon the age and condition of an orchard, as regards the injury of spring pruning, and the great advantage of fall or winter pruning. A young, healthy, and vigorous tree may be pruned in the spring with less detriment than an old, decaying tree. As regards the flowage of sap, the peeling operation and the multiplication of suckers, comparing April, May and June, we have had ample experience. The advantage is decidedly and positively in favor of the latter part of this season. As regards the quantity and quality of fruit, from the pruning in April and July, we have had experience to show that the balance is in the same direction. Cole, in his "American Fruit Book," referring to fall pruning, says:—"Thirty years ago, in September, we cut a very large branch from an apple tree. The tree was old, and it has never healed over, but is now hard, almost as hard as horn, and the tree perfectly sound around it. A few years before and after, large limbs were cut from the same tree in spring, and where they were cut off the tree has rotted, so that a quart measure may be put into the cavity."

As flowers never put on their best clothes for Sunday, but wear their spotless raiment and exhale their odor every day, so let your life, free from stain, ever give forth the fragrance of the love of God.

**FORK VS. SPADE.**—The time honored spade is falling into disuse. Look at yonder son of Erin, as he drives the shining blade into the moist loam, and heaves out a square compressed mass, two sides of which are smooth and compressed as possible. If you are standing near or working by his side he will hit it a rap and crumble the top of it a little, while the mass probably remains intact.

The ground will be leveled off with a rake, and the lump will bake slowly, and remain likely enough hard and impervious all summer, if the ground is not deeply worked again. When spading is done in very dry weather, it is not liable to the same objection in degree, yet it leaves the soil always more or less lumpy.

How different it is with the use of the fork.—The spading fork is found of various forms in the shop. We prefer one of narrow tines, rather long and very thick, made of good steel. A good quality of steel is very important, for often a single tine striking a stone or stick has to take instantly the whole force of the blow or shove. The tines should be thick, as considerable prying power is often required—and they should be narrow, that the earth may be no more compressed than is necessary.

A fork like this may be driven much deeper with the same force. It will lift the earth quite as readily as a spade, and without packing it. If roots of trees, bulbs, or anything of the kind are present, there is little probability that they will be injured, if care is used, and the ground may be loosened sufficiently in many cases without lifting the earth at all, in a way to bear the roots.

The fork, in fact, may be used whenever the spade can be, and a shovel is not more desirable—we do not claim for it superiority in shoveling sand or gravel—and it may be used in many places where a spade can not be used. About trees, in raspberry, currant or vine borders, especially will the fork be found of incalculable service, and the spade should be banished forthwith.

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—A Good Hit.—Some one, at an entertainment in Paris, being asked how he was pleased with the French beauties, who happened to be rather highly rouged, said, "I am no judge of painting."

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—Thin—An Irishman remarked to his companion on seeing a lady; "Pat, did you ever see a woman so thin as that before?" "Thin," replied the other, "botherashon," I seen a woman as thin as two of her put together."

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Funny.—During an examination a medical student being asked "when does mortification ensue?" he replied, "when you pop the question, and are answered, "No."

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—Will not the tax on carpets require upholsterers for collectors?

**OSIER OR BASKET WILLOW.**—A correspondent, writing to "Field Notes," says, "with your permission I will give a few facts relative to the cultivation, growth, market and profits of the Osier Willow:

"It is now five years since I commenced the growing of the willow, and I am satisfied that it pays better than any other crop; and as there are thousands of acres that are now laying useless that might yield from two to three tons per acre, which now sells for \$100 per ton—say \$200 per acre, or more, cash. Now what is to be done? I will tell you: Ditch your land, if it is too wet for good grass, then plow and prepare it as you would for a crop of corn, and do it well, as it has to be done but once. Procure your cuttings of the best kind, the purple or "salix viminalis, set the rows three feet apart, cuttings one foot in the row; plant by a line, hoe them well the first year to give them a good start. Your first crop will be worth but little, yet will pay the expenses if you have a basket maker to work it up; the second year will yield about one third of a crop; and the third year you may expect a pretty good crop, and after that a crop as long as wood grows.

"I will now give you the figures, say on one acre: Hoeing in June, well done, \$5; cutting and binding, \$12, (this may be done betwixt November and April); sitting in water till they will peel, \$12; peeling by machine, \$20; freight, \$10; commission, truck, storage, etc., \$10; total \$69. Now call the crop, say two tons per acre, at four cents per pound, \$170—which is \$40 less than they fetch this year, and from \$80 to \$90 less than I have ever sold any before this year—and this leaves \$91 for the use of one acre, ready cash; and when I consider that this is only one branch of farming, and that almost the whole can be done when other branches do not crowd, and that it is also a quick sale cash business, at much higher figures than the above, I do wonder that there are not more farmers ready to commence the business." J. J.

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To THE BOYS.—I wish just to say to the young men of the farm, not to forsake it for other pursuits because it may not *seem* to some as respectable as to be a city clerk, or a traveling peddler for some quack nostrum; and not be ashamed, at any time of life, of honest manual labor. Leave off supposing that it takes only Patrick or Hans to work the old homestead. No such thing boys; it needs brains—head work—in short, just such quick, active intellects as are possessed by a majority of our native born Yankee blades. "Why, we supposed any dummy could carry on a farm!" No, *sir*—no such thing; and the sooner you disabuse yourselves of such foolish ideas, the better. Better by far pursue a healthful honest occupation, if with only a moderate income, than leave it for the uncertainties of another. above all things eschew idleness—better, I was about to say, make a mistake than do nothing. Make your mark in the world in some way.

## Strawberry Culture and Wine Making.

We have before us a letter to a friend of ours from a fruit grower in Indiana which states that the writer received six hundred dollars from half an acre of strawberries made into strawberry wine, it selling by the barrel at two and a half dollars per gallon. This gentleman says he is so confident that the crop will pay that he intends to make seventy five or a hundred barrels of the wine this year. He has forty acres of strawberries, half of which are at Aurora and the other half in Egypt. where he also has in small fruits and peaches fifty-five acres, the peach orchard containing six thousand trees just coming into bearing. These at sixteen feet apart the usual distance cover thirty-five acres. One would suppose that forty acres of strawberries and thirty-five of peaches would be sufficient to keep one man busy, but it appears this gentleman thinks differently, as he intends to put out sixty acres more of the strawberry. The largest cultivator of the strawberry that we know of is Mr. Knox, at Pittsburg, who has sixty acres, but we have no objection to have our own State ahead in this line. It is certainly expensive for Mr. Knox to send his fruits all the way by rail from Pittsburg some five hundred miles to Chicago, and it is but proper that some of our cultivators step in and relieve him of so much expense, and the further anxiety in regard to the market. From present appearances we may confidently anticipate a fair show of fruit in our markets at no distant day. It is not probable that strawberry wine will command \$2 50 a gallon at wholesale for any great length of time. Mr. Knox says he grows three hundred bushels of strawberries per acre, but the letter in question says one hundred and forty is a good crop, but we doubt if one hundred is not more than an average, even with good culture. Most people would be satisfied with two hundred and forty gallons of wine to the acre, especially if it would sell for seventy dollars a barrel of thirty gallons.

There can be no question that the profit on small fruits is large, or the culture would not be so rapidly extended. Some years since we called them the "great fruits," from the important position that they held.

Willson's Albany and Triomphe de Gand and the Austin are the varieties recommended by this fruit grower. His statements that he has realized six hundred dollars nett profit from half an acre of strawberries made into wine is certainly large, if true of which at the price stated is

rather probable, though we suspect some sugar must have been used.

The Willson should be planted in rows two feet apart and one foot in the row; these can be worked with a scuttle hoe with one horse. This is a cheap way of keeping out the weeds, gives the ground good culture and leaves the plants in a position for easy picking.

---

## Hog Cholera.

Now is a good time to provide against the hog cholera, which is so disastrous to the hog crop in the west.

We have never heard of a farmer losing hogs by this disease who kept them in a good clover pasture through the summer. Now is the time to sow clover seed, and fence off the hog lot; give it a trial, and you will find that you have fenced in your hogs where they are cheaply pastured, and fenced out that scourge that is so fatal to hogs running in the woods and barrens, picking up such feed as they can find. No wonder that they have the cholera.

We have seen many cures for this disease, none of them very high in favor. Camphor in small doses, or sulphur, are doubtless the best, but the prevention is better than all. Put your hogs in clover pastures, ring their noses, give a moderate feed of corn through the summer, and you will have little trouble to fat them in the fall, free of the hog cholera.

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JOURNAL OF THE STATE AGRICULTURAL SOCIETY. The initial number of this journal is at hand, and cannot fail of meeting the public expectation. Without interfering with the agricultural journals of the State, it will prove a valuable aid, not only to the farmer and mechanic, but the State Agricultural Society. The prospectus will be found in our advertising columns.

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IOWA HOMESTEAD.—The *Northwestern Farmer* has been removed to Des Moines, Iowa, and renamed as above, and published weekly. Marsh Millar is editor and publisher. It is a valuable paper, and if the Hawkeyes do not give it a good patronage, they will be blind to their own interests. \$2 a year.

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GARDNER'S MONTHLY.—This journal continues to improve, if improvement is possible, where all the numbers have been good. We club it with the farmer for \$1 50.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS.

M. L. DUNLAP, EDITOR.

SPRINGFIELD, MARCH, 1862.

### Editor's Table.

The plans for the season are now, or at least should have been laid, and the farmers are busy in their development. Seldom has so thick a wall of impenetrable mystery hung over the future of the farmer's prospects, as now. The best crops to plant are but guess work, the last two crops of corn have not paid the cost of their production, or at least all that portion sold since the first of May last. This gives a dark picture to the corn grown and will have the effect to largely curtail the breadth of the next crop. Broom corn is only in moderate request, showing that the prairies can easily glut the markets of the world with this staple. Spring wheat presents the most sure basis and has become the cheap food, that pleases the million, but thus far this crop has been mainly confined to the north, when fall plowing and early seeding is the order of the day, when farmers read and reflect, when they farm it with both brains and muscle. In the central portion of the State winter wheat is much more popular than the spring, and we believe will be proven as certain of a good yield. Farmers are stepping out of the old beaten paths and adding brains to manure and muscle, with an excellent promise of success. Cotton, tobacco, castor beans and sorghum appear destined to yet figure largely in the staple products of our State. The south half the State is legitimately within

the cotton zone. Tobacco, as is well known, can be grown in all parts of the State. Castor beans have been largely grown in the central counties but from some cause that we have not as yet investigated passed off the stage. Sorghum is beyond all doubts a success, and must remain so apparently to all time. The crops to be planted are to some extent already decided upon, but no approximate figures can be fixed upon, as the value of the products, all in that direction lies shrouded behind that black pall that hangs over our political horizon.

**GARDEN SEEDS** —Do not purchase eastern garden seeds, put up by parties that you know nothing about. The large city seed stores undergo an annual cleaning out and these old seeds are purchased cheaply by parties who put them up in small paper packages of about one hundred and fifty of the e to a box and trade them off to the country stores, who supposing them from the labels, to be fresh seeds, innocently sell them to their deluded customers. This accounts for the failure of garden seed to a great extent. The men who put these seeds up, either sell them under the name of some spurious seed grown or counterfeit some well known establishment. You can almost always depend on good fresh seeds from the large city dealers, for they know it will not answer to send poor seed to their customers, especially when there is so neat a way provided to get rid of the old stock. The seed dealers not a thousand miles from Chicago have not been as wise and sell more or less indifferently, but the demand for the past two seasons has been so brisk that we think they must have an entire new stock at this time, whether out of the annual clearing of Eastern seed stores or from the fresh supply we know not, and personally care less, for we have still too vivid recollections of bad seeds from that quarter, to return until we are assured of a little more discrimination in the selections. For our own use we draw on Wilber, of Momence, and the Eastern dealers whom we know send out good seed. As the postage on seeds is but sixteen cents a pound we generally gain more in price than we lose in freight. Our motto is home patronage, but we cannot afford to have part of our grounds grow up to weeds, to assist someone to make a few shillings.

**COTTON SEED**—HOW MUCH WILL PLANT AN ACRE?—A bushel of the Tennessee green seed will weigh twenty-two pounds, and contains in round numbers about 93,000 seeds to the bushel.



An acre of cotton contains from seven to eight thousand hills or plants, as but one plant is allowed to remain in a hill. If every seed was good a bushel would plant at one seed to the hill eleven and a half acres, but as all samples of cotton seed contains more or less imperfect ones not less than three seeds should be planted; to be safe we would prefer to double this, at three seeds to the hill a bushel will plant four acres, at six but two. At this rate, with cotton seed at four dollars a bushel, it will require considerable of a sum to supply the new Illinois cotton fields with seed.

**COTTON SEED BY MAIL.**—To those of the subscribers of the ILLINOIS FARMER who wish a small amount of seed to plant in their gardens or trial, by sending us one or two stamps to prepay the postage, will have that amount of seed sent them. The seed that we have was sent us by Norman J. Coleman, of St. Louis, Mo., who has fifteen hundred bushel and is selling it at four dollars a bushel; it is the green Tennessee plant, the best variety for this State.

The Douglas county *Shield* says there will be at least from 1,000 to 1,500 acres of cotton planted in Douglas county the coming season. We have conversed with quite a number of farmers who propose planting from one to three acres. Cotton, we believe has been raised in this county by some of the old settlers, and we should be pleased to have them communicate their views to us on this important subject for the benefit of others.

**THE LEGAL ADVISER.**—This valuable journal is again on our table. E. M. Haines, Chicago; \$1 a year. We cut from it some matters of interest to our readers—late decisions of the Supreme Court:

**"BOUNDARIES.**—In the description of land conveyed by deed, monuments, tangible things capable of being identified by witnesses, must always control and supercede courses and distances. A railroad is itself a palpable continuing monument."

Farmers cannot be too careful in maintaining of boundaries; a good plan is to plant a tree, an elm, a willow or cottonwood, as best suited to the particular location of the corner.

**REAL ESTATE.**—All improvements of a permanent character placed upon land, designed for its better enjoyment, are deemed a part of the land. By express agreement, improvements of this character may be removed from the land.

Buildings are presumed to be a part of the land, and unless something is shown to overcome this presumption they will always be so considered. A stranger who erects a building upon the land of another, will become a trespasser by removing it. If parties agree upon an exchange of land, and one builds, if the agreement is rescinded without reserving the buildings, they remain with the land. The intention of a party, at the time a building is erected, fixes its character; if he intended it should be permanent, so it will remain.

**CATALOGUES RECEIVED.**—J. H. Stewart, Quincy, has a superb stock of apples, grapes, and ornamental trees, with the usual supply of other fruits, Mr S. is a practical man, and can be relied upon for correctness.

L. Ellsworth & Co., Naperville, DuPage county. This is one of the largest establishments in the State, with a general assortment of nursery stocks, while in the way of evergreens, it is superb.

**SMALL FRUITS,** at the Evanston fruit farm, by Kidder & Knox, strawberries, raspberries, blackberries and grapes make up the list in this speciality. The stock is large and select.

**THE GAME LAW OF ILLINOIS.**—The law prohibiting the killing, ensnaring or trapping deer, wild turkey, grouse, prairie, chicken or quail, went into effect on the 15th of January, and continues until the 1st of August.

**POSTAGE ON SEEDS BY MAIL.**—We again remind our readers that the postage on seeds and cions by mail, is only sixteen cents a pound, or one cent an ounce. They can therefore avail themselves of this to obtain valuable seeds from a distance at a cheap rate. Many of the seedsmen in our small country towns, charge a dollar a pound for such seeds as should sell for seventy-five cents, and which are sent at that price, for this cheap postage on seeds will have the effect to correct these irregularities of small dealers. The immense demand for all kinds of seed in Chicago, should induce some competent parties to engage in the business. We learn that St. Louis is very well supplied in this respect, and a large number of our readers draw their supplies from that quarter.

**THE GRAY OR POWDER WILLOW.**—Overman & Mann, of Bloomington and others, are offering cuttings of this willow. From what we have seen and learn of this tree, it will prove valuable



on the farm for timber, butts and screens, and will furnish a large supply of timber for rails and fuel in a very few years. There is little danger of planting too many trees on the prairie. The cutting will be quite sure to grow. It is among the most rapid growing trees.

**A FALLACY EXPLODED.**—We had always heard it asserted that it was impossible to “make a whistle from a pig’s tail;” but in this age of invention, improvement, progress, the obstacles which lay in the way of accomplishing this feat have been removed, and we acknowledge a Christmas present of a whistle made from a PIG’S TAIL. The successful man is a Vermont Yankee—one not known to fame in this region as the most untiring and accomplished Writing Teacher in the West. The article shows ingenuity and inventive genius. Accompanying his whistle was the following letter:

MR. EDITOR:—You will be presented in the coming holidays with fat Turkeys and good things in abundance. You will be wished a “Merry Christmas” and “Happy New Year,” and to make it so, I present you with a whistle, made of—a Pig’s Tail—to whistle dull care away with during the holidays, and enjoy yourself in the coming new year.

I have whittled it out during my spare moments, to answer that standing objection of the Old Fogy—“You can’t make a whistle out of a pig’s tail.” You see the thing can be did.

Yours truly,

THOS. E. HILL.

*Gazette, Waukegan.*

—When a boy we saw the same feat accomplished, but the value of the whistle when made, bore no proportion to the labor expended upon it, and the maker concluded it would not pay. We may concede that the fallacy has been exploded, but cannot be turned to any useful purpose. We therefore, answer, that a whistle can be made out of a pig’s tail, but would not recommend any of our friends to go largely into the business with the expectation that it will prove a paying investment.

**THE HORTICULTURIST**—The February number of this valuable Journal is on our table. The Frontispiece is the Gladiolus, and is a superb engraving, and the coloring (in colored edition) truthfully done. By the way this colored edition is worth more than the difference in the price, \$2 plain, \$5 colored. Address Mead & Woodward, N. Y., or club with the FARMER at \$2 50.

**ILLINOIS CENTRAL RAILROAD.**—The earnings of this road for January has fallen off nearly one hundred and fifty thousand dollars. This is mainly on account of the loss of its southern terminations. It is certain that the Company cannot long hold out with such a constant drain upon its resources. The officers have been untiring in their endeavors to economise in the expenses, and the President, W. H. Osborn, Esq., has removed to Chicago, where he is giving the whole of his energies to the work. Mr. O. is one of the ablest financiers of the day, and will do all in his power to save the credit of the company. There is no enterprise in the State that has done so much to develop its resources as this road, and now in its need let it be treated kindly, do not kill the goose that lays the golden egg, but cherish her that she may continue to lay during long years. The falling off to the State of the seven per cent. will be about ten thousand dollars, or at the rate of over one hundred thousand dollars per annum, a loss that the State will feel. We hope for the sake of the Company, for the sake of the State treasury, and for the sake of the country, that this state of things may not continue for a long time. The demand for lands of the Company is steadily on the increase, especially in the south part of the State, for fruit culture. Should cotton prove successful, they would soon dispose of all their lands in the basin of Egypt.

**FROM WISCONSIN.**—O. S. Willey, of Madison, Wis., writes us under date of February 12th, that they are having a fine winter, with snow two feet deep, and more coming, and thinks we Suckers don’t know half the delights of winter. Everything is well mulched with Nature’s winter blanket—trees all right, with sound buds—when March comes, then comes the tug of war.

Well, friend Willey, we prefer less of what you call Nature’s blanket. While you Badgers have been enjoying your two feet of snow, and more coming, the farmers hereaway have been enjoying good roads, with fine weather for corn husking, and as the mercury has only marked 6° below zero, our fruit buds, peach included, are all right, and as sound as though we had a dozen feet of snow. March, why, March is a spring month with us, sending out the buds into young leaves, shooting up the tillering spikes of the winter wheat, with the forest made varied with returned songster.

AMERICAN POMOLOGICAL SOCIETY.—By a letter from President Wilder, we learn that the next meeting of this Society is to be held in Boston, commencing the 17th of September next. Ample preparations will be made to make their western friends comfortable, and a warm invitation is extended.

C. R. Overman, of Bloomington, is Vice-President for this State. and M. L. Dunlap Chairman of the Fruit Committee, who is directed to fill up the committee at an early day. It is to be hoped that a full report will be made from this State. The subject is pretty well set forth in another part of the FARMER.

TIME TO PRUNE.—Custom often overrules judgment, and we have so long been accustomed to take from the practice of our fathers the rule to prune trees in February or early in March, that it is difficult to change, even when a knowledge of the error of our course is perfectly apparent. There is no better time to prune than that month in which the tree is making the most wood. The sooner a wound heals the better, and a tree that is growing, all know will heal a wound quicker than one in a comparatively dormant state. The sap, as it rises from the root, is in a crude state, but after it has been elaborated by the leaf it commences its downward current, and forms new wood, or the granulations that assist to heal a wound. It is evident, then, that when the tree has the most of leaves, and in a condition to elaborate the greatest quantity of proper sap, that then is the best time for pruning. This period varies in seasons, from the middle of July to the middle of August.—*Field Notes.*

—All men need truth as they need water; if wise men are as high ground where the springs rise, ordinary men are the lower grounds which their waters nourish.

—What is the most extensive "forward movement" yet reported?

An advance of one Foote up the Tennessee River.

—Joy is always a giant surprise; success is a disappointment among the appointed failures.

—The difference between a carriage wheel and a carriage horse is, that one goes best when it is tired, and the other don't.

—A Chicago paper having said that the secessionists were in league with hell, Prentice suggests that they are within a league of it.

—Foreign Exchange—Would it not be well to offer our Bright for her Bright? Ours is too bad for us; hers is too good for her.

—Ties of choice are closer than ties of blood, unless the hearts are kindred as well as the bodies.

—Eat little to-day, and you will have a better appetite for to-morrow—more to eat to-morrow and more to-morrow for eating.

—Wise's favorite Latin quotation when referring to himself.

*Sic Passim.* It is to be feared our troops did pass him on their way to Elizabeth City.

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### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin now, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

 Correspondents will please be particular to give the name of the post office, county and State.

 Specimen numbers will be sent gratis, upon application

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**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign. tf

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Some of them now in fruit,			
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Red Dutch currant, 1 year.....	25	"	100
Do do 3 yrs.....	10	"	"
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Do do do 8 yrs.....	10	"	"
Red and yellow Anthwerp raspberry.....	1	"	"
Tranconia do .....	2	"	"
F strawberries, 25 varieties, \$2 to.....	10	"	1000
Downer's Prolific strawberry.....	5	"	100
Rhubarb Victoria.....	15	"	"
Do Cahoons.....	15	"	"
Do Scotch Hybrid.....	30	"	1000
Do Seedling.....	10	"	"
Roses, hardy summer, 20 varieties.....	15	"	100
Do Hybrid Perpetua', 80 varieties.....	20	"	"
Do Climbing, 8 varieties.....	18	"	"

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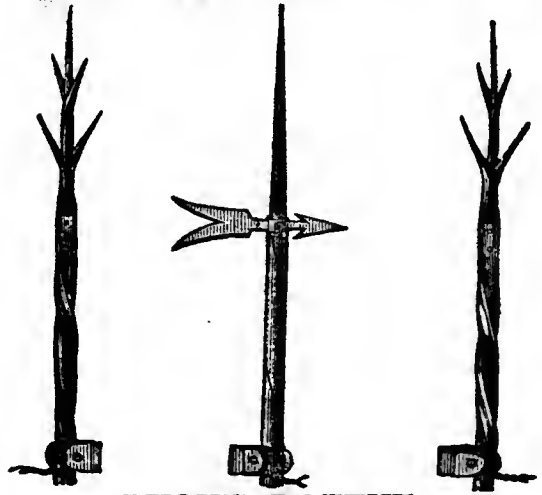
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- 100,000 Quince Stocks.
- 50,000 Quince Cuttings.
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## PROSPECTUS FOR THE JOURNAL OF THE Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

**AGRICULTURE IN ALL ITS BRANCHES,** Mechanics and Natural History, as may require early publication.

All premiums offered and awards made by the State Society will appear in its columns.

All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

To place the Journal within the reach of all, the subscription price has been fixed at

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Barely sufficient to cover cost of publication, payable invariably in advance.

Back numbers for the current year will be furnished until the edition is exhausted.

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**J. W. TENBROOK,**

# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, APRIL 1862.

NO. 4.

## April.

"'Tis a month before the month of May,  
And the spring comes slowly up this way."  
COLERIDGE.

At this writing, March 7th, spring is in the offing. Yesterday when we left our home in Champaign county, two hundred and thirty miles by rail north of Cairo, the whole land lay locked in frost, with here and there a thin patch of snow that the sun had left to show that the winter king yet held undisputed sway. For several seasons we have had our spring wheat sown before this date, but we prefer to see winter keep a steady hold, until spring, by actual force, compels the yielding up to his warm breath. By reference to an article in another column, it will be seen that spring is making up his wardrobe in the south part of the State.—

The vernal flora that has bloomed for ages amid the solitudes of the "grand chain," will soon greet the eye and please the taste.

Here Pomona sits enthroned as queen of these rugged hills, where the sun kisses the peach and paints it with his ardent glow. Another week we may be in the sunny south, surrounded with all the pomp and circumstance of war, armed with our pen we may hold captive many an incident, and note not only the going forth of the army, but the hardy toilers to the field. We shall meet the spring in his going north, driving rugged winter back to his icy fastness beyond "Superior." His vanguard is here where Cairo holds the key to commerce and the dogs of war; huge columbiads scowl darkly over the rapid flow of the father of waters.

Before this reaches our readers the plow and harrow will be afield, the spring wheat

will have been committed to the earth, and the farmer will be busy in making ready for the hoed crops, corn, potatoes, sorghum and cotton. In the South half of the State cotton and sorghum are the new hobbies that the farmers are disposed to ride. While in the centre, the great corn zone will allow thousands of acres to lie idle for want of culture. Thousands of the farm horses are in the army, thousands of owners of farms are there also, thousands of farm laborers and thousands of the sons of farmers are there too; it cannot, therefore, be otherwise than that thousands of acres in that part of the State will not feel the plow when spring gladdens the land. Farther to the north the population is more dense, farming will hold its wonted way and the usual crops be grown. It is there the village manufacturing population has been more largely drawn upon for the war. The spring is slowly on its way; at Cairo the mud is giving way to solid streets; at the "grand chain" the buds on the south sides of the hills are feeling the first breath of spring; at Centralia the birds of passage are bidding the farmer to rejoin the farm and hold himself in readiness, while at Champaign the whole land lies locked in frost, though not so deep that a few warm days will not make the roads impassable and soften up the soil ready for the driving of fence posts. But though spring is coming slowly this way, it will wait for April to pass over our line on its way to wake up our neighbors of the Lake region.

—Virtue without talent is a coat of mail without a sword; it may defend the wearer, but will not enable him to protect his friend.

The Potatoe Crop.

Notwithstanding all the drawbacks to this crop, it continues to be one of great importance; not only to the producer, but to the consumer. Whether the price goes down to ten cents or up to two dollars, it is the common food of both rich and poor, and one that they have no desire to part with.

When a boy, a crop on new land was often four hundred bushels; seldom less than two hundred. An acre was a large plantation—sufficient to supply the family, fatten a cow, go far towards making the supply of pork and paying the village blacksmith. Since then it has become an important crop for shipment to the great cities; that like Jonah's gourd, have grown up since our boyhood. But as it has grown in demand and in favor, the *rot* has made its appearance and at times threatenad its utter extinction. The yield has gone down to an average of about seventy-five bushels per acre. Last season was unfavorable for this crop. The heavy rains of September appearing to have a bad influence on the crop, which is reported over a large area of country to be nearly ruined. In this county, the yield was fair and of good quality, but the breadth planted was less than usual. Along the Ohio river, above Cairo, the crop was good, much larger than usual; so of all the timber counties in the south part of the state. This is fortunate, for it is difficult to get good potatoes at the north. While the crop is worth 40 or 50 cents a bushel in Chicago, at Cairo they are plenty at twenty-five and thirty cents, just the reverse of the usual price, as thousands of bushels have, until this season, been brought south on the Illinois Central Rail Road.

SELECTION OF SOIL.

The best soil on the prairie for potatoes, is after one or two other crops on the sod; often the second crop is best, the sod is nearly rotten, and yet full of vegetable fibre which suits the potatoe. It is then also rich which is of value, at the same time barn-yard ma-

nure is not good for the crop, as it induces the rot. It is, therefore, better to select rich land, or that which has not been exhausted by other crops.

We like sod land after a crop of wheat, barley or rye; these leave the soil open to the air, and the potatoe will flourish in it.

VARIETIES.

The Neshannock continues to hold a high position for an early market variety, as well as for winter use, and it is doubtful if we really have a better one. There are several sorts a few days ahead of it, but these are seldom planted largely. We may safely say that it is the leading early variety. Among later sorts, English Fluke is valuable and highly productive, its form is of the best for cooking long and smooth. Garnet Chili is the most productive of any we planted last season. The potatoe itself is second or third rate, but its productiveness will make it popular. Nearly our entire stock of early potatoes were destroyed last season by the hail storn that swept over our farm on the 19th of June, just at the right time to destroy them most effectually. For the past fifteen years we have grown potatoes for market, and have generally had good crops. Last year, notwithstanding the storm, the crop averaged nearly one hundred bushels to the acre, and harvested as follows:

Carters.....	180	bushels.
Peach Blows.....	20	"
Prince Albert.....	15	"
Garnet Chili.....	15	"
Mexican.....	20	"
English Fluke.....	40	"
Mathews Early Blue.....	15	"
Meshannock.....	450	"

Total harvested on eight acres. ....755

These we planted as directed in the last Vol., that is, plowed in shallows. We have several other sorts on trial in the same way.

As we send our potatoes south for seed, we find the Neshannock the most saleable for that purpose. The eyes are so deep in the Carters, that, notwithstanding their other good qualities, they will not become popular.

The Peach Blow is productive, but only a second rate sort for the table. The Prince Albert are similar to the old Pink Eye. The Mexican is the best of all for cooking; it is also early but not productive.

Mathews Early Blue is the best early potatoe that we have seen.

The Flukes are a fine showy potatoe and productive. The coming spring we should plant of the Mathews Early Blue, Garnet Chili, (Mexican for baking, family use,) Flukes and Neshannock. They cost the most largely of all.

Instead of plowing under in the way previously laid down, we should fit the ground, work out the rows with the shovel plow, cover with a harrow and roll. We find in this way, the crop is equally good, and with Turner's cultivator is easily worked, the crop is more easily dug, as early plowing sometimes gets the seed too deep. When plowing under, we are careful to keep a gage wheel on the plow to prevent too deep plowing.

After the crop is in bloom, we stop working and cut out all weeds with a sharp hoe. If this is not done, the digging will be no easy task, nor will the crop be as good.

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### Culture of Cotton.


In the January number of the FARMER, we gave pretty full directions in regard to cotton culture, but there are two or three points that should not be overlooked in this connection. Cotton seed is ginned in what is called the saw gin; that is, the seeds are taken out with a series of revolving saws. These injure the seed more or less, and care should be taken to use plenty of seed. Plant shallow and roll the land all over. The prairie winds have a wild sweep and will blow the ripe flacculent fibre over the field, and it will be lost. We would therefore, recommend when the fields are exposed, to plant belts of corn among the cotton. This will protect the crop to a large extent. A half dozen rows of corn running north and

south through a field at intervals of a dozen rods will give it a good protection from the sweeping winds. Old cotton seed is to be avoided as much as possible, as cotton when left unginned is allowed to heat, so that the oil of the seed will impart a rich color to the fibre. Of course, but a small per cent. of such seeds will grow. And of several samples tried in the greenhouse, only some twenty per cent. of old seeds would germinate. Not less than a peck of seed should be planted to the acre, even of the best. If there is any doubt of its quality, double this amount; have the soil deep and mellow; plant early and plenty of seed; put it in shallow and roll; give it thorough culture; protect it from heavy winds, and we have full confidence in a paying crop all south of the Great Western Railroad of this State.


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FLOUR AT NEW ORLEANS.—On the 20th flour was quoted in New Orleans at \$22 per barrel. Sugar is 1½ cents per pound!

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 It is a general remark that the growing wheat never looked better or more promising, for the season, than it now does throughout Indiana.

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 By the direction of the Secretary of the Interior the Commissioner of Indian Affairs advertises for purchasers of the Kansas, Sac and Fox Trust Lands. Proposals will be received for the purchase of these lands until the 1st of May next.

---

The Fulton (Ill.) Democrat says: "Farmers from various parts of the country advise us that the young wheat looks very promising at this time, as a general thing."

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WHITEWASH FOR FENCES.—One oz. white vitriol (sulphate of zinc), and 3 pounds of salt, to every 3 or 4 pounds of good fresh lime, it is said, will render whitewash very durable when exposed to the weather.

---

—To have a clear conscience, you must pay the printer.

*A Visit to the Peach Orchards of Egypt—The Climate—Winter Lettuce—A Venerable Pomologist—Dwarf Apples not Valuable—A Disgusted Secessionist—Value of the May or Kentish Cherry—Small Streams to be Avoided in Peach Orchard—Trees to be Planted—Tomatoes—Sweet Potatoe Culture—Popular Varieties of Fruit—Orchards at Makanda—Cotton Culture—Sorghum.*

AT SOUTH PASS, March 1, 1862.

The "Grand Chain" or row of hills that stretch eastwardly across the Ohio, are situated between the thirty-seventh and thirty-eight parallels of latitude, and a little south of the latitude of Richmond, Virginia. To show the mildness of the winter, we will point to the fact, that the lettuce grows for the northern cities, is planted in the open ground in September, and the plants reset in rows six inches apart in beds. These are enclosed with a row of rough boards, the front ones eight inches wide, and the back ones a foot. Stakes are driven at intervals to keep the boards in place, and over them is placed the common glass frames, such as are used on hot beds. No particular pains are taken to make close fitting joints to keep out the frost, and yet the lettuce is not only, not injured by frost, but continues to grow through the winter, and within two weeks will be ready for market. The plants, having both air and sun, are of a healthy green color, much to be preferred to those grown in close hot bed frames at the north. The ground never freezes to exceed three or four inches deep during winter, and could be plowed at almost any time. At this writing the season is said to be unusually backward, and the buds have but just commenced to swell, though the nights continue frosty. This is looked upon as a good indication of a favorable season for fruits, in diminishing the danger to late frost by the too early starting of the blossom buds. As there is little at this early season to interest the eye, we turned our attention more to the extent of orcharding and the details of the business. It may interest our readers also, to see the rapid progress made in the business at this point, (Cobden Station,) the post office of which is named South Pass.

On the sixth day of March, five years since, Conductor Eddison, (now of the Ordnance Department at Cairo,) put us in company with Col. Ashley and a few other gentlemen, down at this point for the purpose of examining these hills in regard to their value for fruit growing. Two small orchards had been planted the year before,

and others contemplating a like effort. From our examinations, we pronounced the location more desirable than Jonesboro, and the result has proved that we were not mistaken. Since that time, the station has been located, and the heavy timber that graced the sides of the deep gorge, through which the railroad winds its way up the valley of the Drury, and over to the Oocler, have given place to the white houses of the village, and to extended orchards of the peach and other fruits. To illustrate this more fully, we will give the statistics of a few in the neighborhood. First, is Mr. Benjamin Vancil, a native to the manor born, who has seen over sixty winters come and go, and for the last fifty years has resided on the same spot, which is about one and a half miles east of the village of South Pass. His orchard is not large but his experience is valuable. For fifty years he has known the Buckingham Apple that has attracted so much attention in this part of the State for the last half a dozen years, and at our State Fairs, has been the center of attraction in the fruit department. If he was to plant an orchard of Autumn apples of a hundred or a thousand trees for marketing, he "would most unhesitatingly select this variety. The tree is hardy and always productive; the fruit large, fine and desirable; is good for cooking, eating, drying and for cider. It is the Autumn apple for the commercial orchard." Whether it is adapted for the country further north, we cannot say, but from what we have seen of it, we must coincide with Mr. Vancil. Of summer varieties, he is pleased with the Early Harvest for eating, the Horse apple for cooking and drying, the Summer Queen for market. Of late the Keswick Codlin has pleased him highly as an early cooking market apple. He thinks Red June is of little value, the fruit is too small, and the birds have a strong liking to them and seriously injure the crop. The Summer Queen, he thinks, will be one of the few leading summer fruits. He has several trees of the dwarf Paradise, the kind so commonly used for dwarfing the apple. These bear well, are early and sell at good prices, but must give place to better varieties. Of the dwarf apples sent out from Rochester, he has about twenty trees, three to four years set, which bore the last year from three to eleven apples each. He has a good opinion of them, but we are satisfied that most of our varieties are their own roots, treated in the same manner, would have done even better than this. Our faith in dwarf apples for the west is too slight to be of any value. The Buckingham has been called by



some a winter apple, and doubtless will so prove at the north, but it is seldom that specimens are seen at this date, and then of little value. Its season is from October to January—at this point. Of winter varieties he has had long experience with the White Winter Premium, and esteems it among the best. Four years since, he had eight large trees grafted with the Esopus Spitzenburg, and last season gathered from these trees over fifty bushels of most superb fruit. It is possible that this popular eastern fruit may prove productive on these hills. The Little Romanite is productive and always sells well. The Yellow Bellflower also, promises well. Winsap is always a fine and valuable variety, while the Baldwin is of no value. Mr. Vancil has a peach orchard of some twelve hundred trees, mostly seedling cherry trees from the Rochester nurseries, now promise well, but too young yet to determine their value. The plum crop is always ruined by the curculio, which also does a large amount of damage to the peach crop. Pears promise well, but the orchard is too young to decide on this point; certainly the trees are very thrifty. Out of 280 dwarfs, three years set, one hundred of them fruited the past season. Mr. V. has quite a plantation of Houghton gooseberries which produce well, and for which a ready market is found in Cairo at two dollars a bushel. We should have said that the Rho. I. Greening promise to be profitable here; it is an early winter fruit. In his orchard are some twelve hundred apple trees, embracing seventy varieties, two thirds of which have fruited. No person visiting this point for its fruits, should fail to call on this venerable pomologist, whose grounds teem with an almost endless variety of valuable fruits.

Casting your eyes to the east from the station, far up the rocky front of Mount Tabor, and embracing its summit, is seen the plantation of Col. Bainbridge. The Union cause has broken his heart. His neighbors have no sympathy with secession, and the booming of cannon at Forts Henry and Donelson which came like distant thunder to these grand old hills, bearing in each echo a shout of triumph, was the last feather that broke the camel's back. The sacred soil of his native place was invaded, and his kindred were being involved in their own traitorous meshes—he would sell his homestead and retire to a farm of his in southern Missouri. Ten thousand dollars was quickly offered and as quickly taken, for these one hundred and twenty acres of fruit lands are the best in all this region. The orchardst

in their infancy, gave an income last year of over two thousand dollars. The fortunate purchasers are the Brother Evans' of Makanda, whose cultivated taste and energy will make this plantation a paradise of the beautiful and the useful. The orchards on this plantation contain four thousand peach trees of the best varieties for bearing; two hundred dwarf pear, four hundred apple, one hundred of which is the Keswick Codlin, one hundred Early Harvest, and one hundred Yellow Bellflower, and the remainder White Winter Pearman and Buckingham. It may appear strange to many to know that the Codlin, though only a cooking apple, yet is the most profitable for market; what it lacks in high price it makes up in steady productiveness. In the vineyard there are five thousand bearing vines of Catawba and Isabella, but the ~~not~~ nearly destroyed the crop last season. The sides of this hill, in common with others in the vicinity, is occupied in part, with masses of sand stone, known among geologists as silicious conglomerate. This belt overlies the shale, which in turn rests on the mountain's limestone, and the south and west side of this hill is largely occupied with this rock. The base of the orchard and vineyard rest upon this bed of sandstone, and passing over the summit of the hill, is lost in the woody slope on the north and east. The next hill to the east is Mount Lockout, whose summit contains the orchard of Mr. C. Colby, and contains fourteen hundred bearing peach trees of the best varieties; four hundred pear dwarf and standard, set alternately. One hundred of the May Cherry of the west, and which is doubtless, identical with the Kentish of Downing, but not the Early May or Richmond of the New York nurseries. This cherry promises to be valuable as the fruit is so early, being ripe the last of May. This fruit is soon to become abundant in the Chicago market, from the last of May to the last of August, the first from this point and the last from northern Wisconsin; it is one of the fruits which are at home in a wide range of climate. Mr. C. has one hundred of the Quince which are growing thrifty, and judging from specimens seen at Jonesboro, we think they will succeed. One hundred and fifty grape vines of several varieties, are very promising. But the most interesting feature of the grounds of Mr. C., is four acres of Willson's Albany Strawberry, set last year and ready for a good crop. They were set too wide apart to be worked to advantage; the rows are four feet instead of two, and 20,000 instead of 40,000 set on the four acres.



At two feet they are easily worked with a horse, and giving a better opportunity for the pickers to gather the fruit without injury to the plants and the green fruit.

On a part of the same hill, is the orchard of Parker Earle. He has one and a half acres of the Willson; these are closely planted and will produce a full crop the coming season. Mr. E. has three hundred peach, one hundred pear and two hundred apple trees, all growing exceedingly thrifty; but the strawberry is his particular hobby, and which he is riding to no small profit.

A mile north of the station is the extensive orchards of Messrs. Clark & Newhall, containing five thousand bearing peach trees, two hundred of the apple, fifteen hundred pear planted, alternate standard and dwarf, one and a half acres of the Willson Strawberry, a thousand grape vines and half an acre of the Lawton Blackberry. These we saw last summer loaded with an immense crop of fruit—far ahead of anything of the kind to the manor born.

Mr. G. H. Baker, so well known to our State Fair goes as the person exhibiting the immense collection of apples from Egypt, is the owner of Floral Hill, about three-fourths of a mile to the west of the village; has sixteen hundred of the peach, six hundred of the apple and one hundred of the May or Kentish Cherry, two hundred dwarf and standard pear, an acre of the Willson Strawberry, and a small vineyard.

The other orchards in the neighborhood are: Mr. Hoag; 300 apple just in bearing, 900 peach six years set. The year after this orchard was set, we pointed out its bad locality. A small stream is on the south side of it, which saturates the air at night and is liable to freeze and kill the blossom buds, while the same degree of cold, with a dry atmosphere, would do no injury. The orchard has never produced but little fruit of the peach, but as the surrounding woodland is cleared off, it will improve, but never be desirable for this fruit. Apples and other hardy fruits will prove more profitable. Mr. H. has 400 grapes, but we fear they will not prove more desirable than the peach.

J. A. Carpenter, the curiosity man of Egypt, has 1200 peach, 1200 apple, one and two years set, besides considerable small fruits. His place is distant four miles. Mr. C. usually brings to our State fair a full car load of pigs, chickens, dogs, fruits, specimens of timber, etc.

Dr. Beckwith has half an acre of the Willson Strawberry; David Gow one acre of the same

strawberry, besides a large plantation of the peach and apple set last spring. F. A. Nichey half an acre of the Willson Strawberry. T. A. E. Halcomb, 300 peach and 100 pear. Mr. Kimmell, 1500 apples, 200 pear, all dwarf. H. Randleman 1100 peach. A. Buck 300 peach, 100 apple. Chas. Musson 1000 apple, 800 of which are in bearing, and a large orchard of seedling peaches many of them fine October sorts. Mr. Howlet 3500 peach; Mr. Webster 1000 peach, 600 apple 100 pear, and 100 grape.

There are now at this point ready to be set, ten thousand peach, ten thousand pear and five thousand apple trees—enough to set one hundred and seventy acres of orchard. Last spring there was seventy thousand plants of the Willson's Albany Strawberry set out in this immediate vicinity, and the coming spring, the number will be quadrupled.

Mr. Geo. E. Walker, some four miles west of the station, has three thousand peach and apple, and five hundred pears three years set, and just coming into bearing. He has also a small vineyard. There are a large number of old orchards both of peach and apple, mostly seedling. It is only our purpose to notice those containing grafted fruit of the approved varieties, but enough has been given to show that at no distant day the shipment of fruits from this station, will be immense.

#### TOMATOES.

It is from this station that the main supply of early tomatoes come to supply the Chicago market. The plants are now just up in the hot beds, and preparations are making for the crop, which will be only a limited one, the general impression being that the demand will be light.

#### SWEET POTATOES.

We met Mr. Nesbit, who resides five miles to the east of the station, and has grown sweet potatoes for the market for the past seven years. For the past three years he has planted the Yellow Nansemond, and finds it the most profitable for market on account of its early maturity. He plants about ten acres a year and has an average of one hundred bushels to the acre, which Mr. N. considers a fine average crop. Those bring on an average, at the station, seventy five cents a bushel and find a market south, being nearly four weeks in advance of the larger varieties, usual to the vicinity of Cairo and Columbus. But few of these potatoes ever go north. It is evident that this branch of business could be profitably extended at this point. There is

another feature in the sweet potatoe business that should not be overlooked, and that is: the effects of the climate in preserving them through the winter. It is well known that in some parts of Kentucky and points south, that the sweet potatoe is easily kept through the winter without artificial heat, while in all the States north of the Ohio river, they are kept with the greatest care in buildings warmed with artificial heat. This has added so much to their value, that few can afford to use them on the table; the usual price being one and a half to two dollars a bushel—a price that excludes them from most tables, and which can only be paid by those wanting them to sprout for seed. Mr. Nesbit finds no difficulty in keeping them over winter. After digging, they are left on the surface to dry; if the weather is favorable, sometimes they are left out two or three days. After drying in this way, they are put in the cellar and mixed with dry sand. The only danger is in keeping them too warm on the start. To avoid this, the cellar is kept well aired, and of course must be located in a dry airy place; but so soon as there is danger of frost, it is kept very close, and only opened to admit air when the thermometer is above forty degs. At the north, if the potatoes are left above the ground a few days, they will rot, while at this point they commence to grow. No advantage has, as yet, been taken of this discovery to preserve large amounts for market. We have, during the past six years, seen sweet potatoes kept over in the cellars of the farmers in this part of the State, and have often eaten them in March, and it is a matter of surprise that no one has gone into the business. Mr. Nesbit has for some years been in the practice of keeping over seed for his neighbors, for which he has only charged a dollar a bushel, and which he considers as profitable as to sell them in the fall at seventy-five cents. This being the case, the time cannot be distant when the northern cities will have a spring supply of sweet potatoes at a reasonable rate. We are satisfied that the crop is a profitable one at fifty cents a bushel; to this add twenty-five cents for wintering; freight to Chicago by the car load, twenty cents; cost of packing, five cents, making one dollar in the hands of the wholesale dealer. If twenty-five cents is added for cartage and retailing, the price will be within the reach of most persons, and will soon place them among the staple vegetable of the market. That this result will be reached, we have no doubt. The most valuable lands for this vegetable at this point, are not

adapted to the peach and other valuable fruits, and the same crop can be grown year after year on the same ground without the aid of manure. We often hear of much larger crops, say from two to three hundred bushels to the acre, but we have confidence in this estimate of Mr. Nesbit. He is a careful cultivator, and whatever may be grown at other points, he is positive in regard to this. We have occasionally seen a larger yield three hundred miles north of this, while the average is not one-half as much.

#### PROFITS OF FRUIT CULTURE.

The profits of fruit culture depend upon a proper selection of varieties, and upon the care of the trees. Mr. Baker has peach trees three years set in his orchard that produced over one and a half bushels the third year and sold for three dollars a bushel, paying him five dollars. The trees were Coolage's Favorite and Old Mixon Free. These peaches sold in Chicago at three dollars the basket of half a bushel. The planters are confining themselves to a very few varieties. Troth's Early stands first and foremost, though the Early Barnard is coming into notice. Large Early York, Early and Late Crawford, Old Mixon Free. Coolage's Favorite, George the Fourth and Heath Cling for late, are the most popular and generally planted. Among the apple, Keswick Codlin and Horse Apple for cooking and drying, Red June and Early Harvest for eating. William's Favorite, Benoni, Summer Sweet, Paradise, Sweet Bough and other popular summer varieties are, as yet, little known, and their value for this climate not decided. The Summer Queen has thus far given promise of great value. Buckingham for autumn and early winter are about the only sort that are considered of any value. The winter varieties are limited to Willow Twig, large quantities of which are grown in William and Johnson counties. White Winter Pearmain, Winesap, Smith's Cider, and of late Rome Beauty is attracting attention. Apples at this time sell readily at a dollar a bushel and not a supply at that. Peaches are sold by the box or basket of half a bushel at from one and a half to two and a half dollars each, while the common seedlings brought in by the farmers, sell at twenty-five to seventy-five cents, and yet but few of these old settlers can be induced to set out the new varieties, preferring to sell out and go further west. The result is that the population is rapidly changing, and will soon be mainly composed of northern and eastern people.

## THE PEACH BUDS.

On examining the buds to-day, Feb. 27th., we find that, as a general thing, they are little injured—not enough on any of the leading sort to create any alarm. A variety purchased for the Columbia, but not true, is the worst off. Seventy-five per cent. killed; Early Crawford, say ten per cent.; Early Tillotson, fifty per cent.; all others about five per cent.

## ORCHARDS AT MAKANDA.

Makanda is next in importance to South Pass in the way of fruits. Messrs. T. J. and F. Evans sold their home plantation to a gentleman from Maryland, for \$10,550, all cash. This plantation has on it 7500 peach, 500 apple and 400 of the pear, one to three years set. These brothers have another farm at this point, on which they are to set sixty acres in the spring. Messrs. Deo & Co. have 200 quince, 50 of the May cherry, 1500 peach, all three years set and fruiting last year, and 400 of the apple, three years in the orchard. B. L. Wiley, 3000 apple, a large number of which are the Newton Pippin, and which promise to prove valuable. Messrs. Hadley & Harkelrode, 450 peach, six years set, and producing large crops the last season. Dr. Pelton, 200 peach. Mr. Shaw, 300 peach. These are but a few of the planters at that point.

## COTTON CULTURE.

We learn from Col. Ashley, that all the cotton seed produced at the Jonesboro cotton gin, has been distributed in the immediate neighborhood of the gin for plantings, without charge to the farmers, but it cannot be purchased at any price, as the owners of the gin make it a point to increase their own business at home, insist that the seed be retained in the neighborhood. If seed is furnished at the stations along the railroad in time for planting, a large breadth would be put in.

## SORGHUM

is at this point the great crop hobby; but the prospect of an early opening of the river south, is throwing cold water on it, and if the cotton seed comes to hand, less of this will be planted, if not, a large breadth will be planted. This season is very favorable to the sorghum and its growth has been thus far highly satisfactory.

—When a fellow is about to be burned by the savages, his very existence is at stake,

[For the Illinois Farmer.]

## Some Things That I Have Learned.

I have learned that a farmer who leaves his legitimate business and embarks in merchandising or any outside speculation in no wise connected with his farming, is in danger of losing his farm. Nine-tenths of those who have lost their farms in the last five years in this county, may attribute their losses to the mistaken notion that they could make money easier and faster in some other business.

I have learned that a man who is in the habit of trading at one store and at another store, and at half a dozen stores during the season, on credit, and thinks in the fall he owes about fifty dollars, will be more likely to find when he settles with all, that he owes the fifty with a figure one at the left hand of it.

I have learned that the only safe way for a poor man is to pay for everything he consumes in the family at the time of purchase; he will then be more capable of judging which will do him the most good, the merchandise or the money laid out some other way.

I have learned that there are many things that we think we need, which, by adopting the above rule, we are forced to do without, and we get along just as well and are just as happy.

I have learned that it will do sometimes to buy seeds and farming utensils at reasonable prices, on credit, when the probability is that the use of them will be worth several times the interest.

I have learned that nine-tenths of the agricultural machines offered for sale are of no use whatever, unless it be to line the pockets of the sellers, and some even fail to do that.

I have learned that whoever buys a machine or any other thing on credit and pays for it when he agrees to, can buy again on credit when he has occasion.

I have learned that men who pursue agriculture merely for the purpose of supporting themselves and families, and not from any love of the business, seldom do more than accomplish the primary object.

I have learned that what people can do well they generally like to do, and what they cannot or do not do well, is irksome.

I have learned that a farmer who takes two or three good agricultural papers, like the ILLINOIS FARMER, and pays for them in advance, invests his money where it brings him an enormous interest.

S. W. ARNOLD.

Cortland, DeKalb Co., Ills., March 1, 1862.

—The above is most excellent advice, and some of our readers will do well to heed it.—Mr. Arnold has promised us further instalments of the same sort. Send it on, we like this kind of talk.

Ed.

### Justice to the Press.

I have just been invited to notice an article headed "*Good on Newspaper Scribblers.*" published in the ILLINOIS FARMER for March, and credited to the Waukegan Gazette.

This article mentions a sitting of the Executive Committee of the State Agricultural Society, when it was proposed to publish a monthly Journal to be called *The Journal of the Illinois State Agricultural Society.*

The announcement was followed by this remark: "Capt. Wait, the venerable and excellent member from Egypt, spoke warmly in its favor, urging that the society ought to adopt some measure by which it could be "*independent of the newspaper scribblers all over the country.*"

The "*Capt. Wait*" alluded to is probably myself, although I can boast of no such title, and in reply, I beg to say, that I am a friend to the institution of such a Journal, but not for the reason assigned, to render the society *independent of the newspaper scribblers.*" I do not recollect of making any such remark; if I did, it was a mere *lapsus linguae*, made without reflection, and without the assent of my heart or my sober judgment, and I take the earliest occasion to express my sincere regret for an offense that was wholly unintentional, and to ask pardon of the whole editorial fraternity for its gross impertinence.

To show that my whole heart is in this apology, I need only advert to the fact that my honored father established the first newspaper press in Maine, before I was born, and was a "*newspaper scribler.*" Although destitute of the merit of editorial responsibility, I have been a newspaper scribler myself for more than half a century, and even at this late day, I have not entirely outlived the propensity.

It is from no unseemingly partiality, but the result of my best judgment and reflection, and in numerous instances, with the aid of intimate knowledge, that I consider the editorial fraternity of the nation, as possessing a general character for intelligence, liberality of sentiment, disinterestedness and patriotism that is unsurpassed, if equalled, by any other profession, whatever and that without the aid of the newspaper press, and "*newspaper scribblers,*" free institutions could never have been established, and were they now suppressed, free institutions could no longer be sustained.

WILLIAM S. WAIT.

Greenville, Bond Co. Ill., March 19, 1862.

—The article alluded to was first published in the Chicago Evening Journal, and was from a correspondent attending the meeting of the Executive Committee. Coming under the notice of the editor of the Gazette, who has served several years in the editorial chair in Egypt, he felt disposed to vindicate the scribblers,

In justice to our much esteemed and honorable friend W. S. Wait, we cheerfully give place to his disclaimer, and exonerate him so far as we are concerned, from any disposition to detract from the value of "*newspaper scribblers.*" We think it highly probable that the correspondent of the Journal might have misunderstood the remarks of Mr. Wait, and from our personal acquaintance with him, believe that he will at once set the motive right.

Ed.

### Vermin on Cattle.

Oxen and cows, and especially young cattle, are very liable to be attacked by vermin, and unless care is taken to prevent their depredations, they will seriously impair the growth and productiveness of the stock. In the spring these exotics usually show themselves the most numerous, and for this reason we call especial attention to the matter now. Applications are annually made to us for some remedy to destroy these pests, and among those suggested are—

Any clean oil, applied to the skin and thoroughly rubbed over all the upper portions of the animal, and particularly along the line of the backbone, between the horns and ears, and on the shoulders and neck. The reason for covering such large portions of the creature is, that lice do not breathe through the mouth, but through breathing holes or pores in the body, and when they come in contact with oily substances, these pores are stopped, and they die.

Fine sand, or dry loam carefully sifted over the animal, and frequently repeated, will greatly annoy vermin, and perhaps drive them from their places. It is probable that cattle paw the fresh earth and throw it upon themselves, for the same reason that fowls burrow in the ruts or the dry garden soil.

Ashes—Some persons apply wood ashes, and it is good, but requires to be used with much care. If it is applied plentifully, and the animal is exposed to rain soon after, the ashes are leached, trickles down in lye, and takes off the hair as it passes.

Tobacco water is also employed by many, and is frequently effectual. This may be purchased in a highly concentrated convenient form.

Kerosene has been latterly used, and with success. If applied too freely, it seems to set the hair and partially tan the skin. When it has been applied profusely, we have seen the old coat of hair remain on nearly through the summer, while the skin under it was hard and dry, and appeared to be inactive.

Yellow snuff is often successfully applied.

*Unguentum* is a certain remedy, but is a dangerous one in unskillful hands. Its active property is probably quicksilver (mercury), and has a powerful influence upon the skin, rendering the animal liable to take cold upon exposure.

*Spirits of Turpentine* is another remedy, and is said to be a most effectual one. The mode of using it is to take a common wool card, and pass it over the animal until the teeth are pretty well choked with hair, then pour on a small quantity of spirits of turpentine, sufficient to moisten the hair in the card, and again pass it over the animal's coat—applying the card first in places where the vermin "do most congregate." In this way every insect will be compelled, almost immediately to "vamoose." The operation should be repeated in the course of three or four days, as newly-hatched lice may supply the place of their progenitors which have been destroyed or driven off by the first. As turpentine is of a very diffusive and penetrating nature, one wetting of the hair in the card will be sufficient to dress off an animal of ordinary size. This last remedy we give on the recommendation of others, and not as the result of our own experience.—*New England Farmer.*

### All in the Rat Line.

The Circleville (Ohio) Watchman tells of a movement among the farmers of one of the townships of Pickaway county to rid their barns and stacks of rats. Some forty-two citizens formed an association, and divided equally twenty-one on a side, and then proceeded to hunt and get rat tails as best they could. The conditions of the hunt were as follows:

"The party or side that produced the least count of rat tails on the 20th of December, were to pay Abram Dennis, landlord, \$2 each for supper for self and partner, the privilege of the ball-room and enjoying a social dance, and the winning party to go in free of charge."

On the appointed evening the rat tails began to pour in by hundreds and thousands. A committee was appointed to make the count, and the following was the result: Whole number produced was 17,370, making an average of 413 to each man in the hunt. One side beat the other by 2,476. The contest being over, the supper was served, of which 175 persons partook. After supper the party proceeded to the ball-room, danced all night and went home with the girls in the morning.

The Watchman estimates that the killing of these rats will save 35,000 bushels of grain in a year, and, if followed in each township in that county, with the same result, would save 525,000 bushels of grain every year, which would be worth \$150,000 at least—a pretty nice item.

That was combining the useful and the agreeable in a way highly commendable to the parties engaged.

☛ He that would live at peace and ease, must not speak all he knows nor judge all that he sees.

### Sorghum Mill and Refinery at Tuscola.

The meeting of farmers yesterday, resulted in all that was desired. The 800 acres was pledged, mostly in small quantities. For the location of the mill Messrs. Lathrop & Smith desire twenty acres near the lower railroad crossing. The ground is owned by Mr. Baker, of Charleston, and we understand that Mr. Ficklin, who owns the adjoining tract, has offered to deed Mr. Baker twenty acres of any part of his farm, if he will deed to Messrs. Lathrop & Smith the twenty acres they desire. It is thought Baker will accept, and if he does, they will commence the erection of the mill without delay. When completed it will cost about \$36,000. Its benefit to the place and surrounding country is beyond calculation. The trade it will draw here will tell immensely on the prosperity of the town.—*Douglas Co. Shield.*

Our farmers and business men appear in earnest in regard to sugar making. Our fine climate, rich soil, and enterprising people, will form a full match for the south in their present disorganized condition. Roll on the ball! Tuscola is setting a good example for other points in Central Illinois.

Ed.

### Tobacco Culture—Minute Directions to the Farmers of the West.

Some days ago we printed a brief article, in which we urged the farmers of the northwest to pay some attention to tobacco as a crop for this year, basing the appeal upon the fact that all tobacco-growing districts in the country are suffering from the rebellion, and that the year's crop will necessarily be small and prices high. A gentleman of this city—a man of sense, education and character—who has had much experience in tobacco culture in New York, has undertaken to prepare for our columns a series of articles, in which minute directions to the sower are set forth. His information is reliable and valuable. We print the first of his communications below:

EDITORS CHICAGO TRIBUNE:—Noticing an article in a late number of your paper on Tobacco Culture, it occurred to me that some practical information on the subject might be of value to some of your readers, and therefore I volunteer a few remarks to that end.

The only kind of tobacco grown successfully in the northern States is the "Seed Leaf," used in the manufacture of smoking tobacco, and has been mostly confined to small districts in Connecticut, New York, Pennsylvania and Ohio. Connecticut having taken the lead in its production, her tobacco has become the standard of quality, and consequently much of the higher grade of seed tobacco furnished for market is sold as Connecticut seed, though actually grown in New York, Pennsylvania, Ohio, or elsewhere. Its main feature is its quality, and the profit arising from its production upon the ability of the producers to furnish a quality which will command a ready market and a good price; and, I



will add, that no article of production commands a more prompt and certain return than a first class quality of seed tobacco in every market.

In the States above mentioned the crop has proved very profitable where proper land has been selected for its growth, and the requisite skill and care exercised in its management. The average yield per acre, under good husbandry, is about 1,500 lbs., and on choice soil and rich, extra tillage, 2,000 to 2,500 lbs.

The average price for a good, well managed crop has been about \$200 per ton; on extra crop as high as \$220 and \$300 per ton.

After the proper fixtures are erected, the cost of the crop, fitted for market, is from \$40 to \$60 per acre, depending upon the price of labor, manure, etc. One consideration in regard to the labor, however, is, that one half is required in the winter season in preparing it for market, at which time farmers have but little to do.

These figures show, in case of successful crop, a very large return for the labor and outlay, and will admit of a reasonable allowance for a poor crop and still have a profit; they are based upon my own operations for several successive years in the production of tobacco in the state of New York. They show a moderate estimate of the costs and receipts.

The fact that tobacco of thrifty growth and good quality can be raised in Illinois, Wisconsin, Indiana and Michigan, has been demonstrated to a certainty. During the seven years that I have been a resident of Chicago, my attention has been called by dealers to samples grown in all the last mentioned States. These samples prove that the proper soil for its successful growth is not wanting; but they also prove that the benefit of this production is lost for the want of knowledge in the curing and preparation of it for market; for its unmarketable condition renders it valuable only for the most common uses to which the article is appropriated; and, in consequence, the owner realizes only one half, and sometimes not over one-fourth, of the price which it would have brought had it been properly treated from the time it was taken from the field.

The samples which I have examined from Michigan and Indiana, when considered independent of the condition, did not exhibit as fine a quality of leaf as those of Illinois. Specimens of Illinois tobacco show as fine and elastic texture and as good a burning quality as any of Connecticut, New York or Ohio; and, under the same treatment, I have no doubt, would bear as good character in the market after its merits become known. Another feature encouraging to the western farmer to try the experiment, is the fact that the supply of the northwestern States is now being manufactured to a great extent at Chicago, and that the stock of leaf tobacco which furnishes these manufactories is purchased east, and comes to the manufacturer charged with the profit of the jobber and cost of transportation, over the amount received by the producers, as stated above. In this view of the case, it is a matter of importance to the farmers of the west, and especially of the fertile regions of Illinois, in districts distant from market, to make the experi-

ment, and if successful, add this valuable product to their rich harvests.

To enable any one who are not acquainted with the crop, and who may desire to make the experiment, I will briefly describe the process by which the crop is produced. The soil requisite for a good growth and quality is a dry sandy loam, in a warm location, protected as much as possible from winds. Soil containing any mixture of clay is objectionable. The field selected should have been under cultivation for the last year and highly fertilized by manures; should receive another dressing this spring, and plowed deep as early as the condition of the soil will admit. One object of using artificial means of fertilizing is, that it improves the burning quality as well as stimulates the growth of the product.

The first business, however, to command the attention of the farmer who intends to make the experiment this season, is the preparation and seeding of a bed for the production of the plants. As soon as the land is in a condition to work light, select a patch of rich, warm, light land, in a position to be shielded from exposure to the north and west winds, and prepare a bed with a plentiful admixture of strong compost. Hog or hen manure is preferable, for the reason that it is much more active in hastening the growth of the young plant and does not incumber the soil by preventing the surface from being rendered friable and equally pulverized for the reception of the seed, which is small, and requires a position so near the surface that it is hardly covered from exposure. The manure or compost should be near the surface. When the bed is prepared the seed should be thinly and evenly distributed over it, and should be immediately fastened by pressing the surface firmly with the back of a shovel, and the bed then covered with a layer of clean, straight straw, and kept in its place with light poles, laid upon it at suitable distances. This covering should be sufficiently thick to prevent the seed from being distributed by the wind, and to assist the land to retain moisture on the surface and not prevent the warming influence of the sun upon it. This process ensures a uniform germination of the seed, and in one-fourth of the time required by leaving the surface exposed. This covering should be left undisturbed until the plant appears and then removed. The plant may be distinguished on its first appearance by its small round leaves, closely set to the stem, and unlike other plants. As soon as it has attained sufficient size not to be disturbed by weeding, the bed should be cleaned of weeds and the plants thinned sufficiently to grow separately without interference. This should be done without pressing on the bed, as it is required to be kept light. A plank supported at each end, laid across the beds for the laborer to recline upon while doing the work, will obviate that danger. The beds should be constantly attended and kept clean until the leaves of the plants are two inches in diameter, when they will be fit for transplanting. The seeding may be done as late as the middle of April, but it is desirable that it should be done as early as the first. A few days before the plant is ready to set, the field intended for the crop should be



again plowed and harrowed, and rows marked north and south three and a half to four feet, and places prepared with a hoe two feet apart on the rows, for setting the plant. The first wet day after the ground is prepared should be improved in transplanting. This process is most important of all, and, I shall, therefore, be particular in its description. The plants should be moved while the bed is wet, by inserting a small iron instrument to the depth of the root, gently loosening it, until it can be easily drawn out. They are then transferred to the field, and by means of a round pointed wood instrument one inch in diameter, a hole is made some four or five inches deep in the place prepared, into which the root is inserted and the earth pressed firmly together around it. During the season of its growth the field be kept clean with the hoe as long as there is space to work round the plants.

I have thus far been minute in describing the process, hoping to assist any unacquainted with the crop and its mode of management who may feel disposed to make the trial this season. In a subsequent article, with your permission, I will give your readers the mode of maturing the plant for harvesting, and the subsequent management of curing and preparing it for market. Also directions for the erection of cheap and convenient fixtures for the purpose.

#### SEED LEAF.

**PLANT AN APPLE ORCHARD.**—This is the advice given by an agricultural exchange. Plant an apple orchard. The old ones are fast dying out all through the older States. They were planted a hundred years ago, or more, have done good service, and ought to have their day. When apples are three dollars a bushel and upward, there is not an adequate supply in the country. They can be grown at a dollar a barrel, with profit. The apple crop in a single small county in this State, was worth half a million of dollars last year. Other counties in the older parts of the Eastern States, were under the necessity of paying out a hundred thousand dollars for this fruit, because they had not the article at home. Peaches and plums we may be able to get along without, but apples we must have—for sauce, for pies, for the desert, and for the dinner basket of little boys and girls who can not come home from school to dine. We say then to every farmer, plant an orchard of at least a hundred trees. The trees are all ready for you at the nursery, well grown and grafted, two and three years from the bud. Get thrifty trees, of varieties that you know will flourish in your locality, and in four years you will be eating fruit from them. Do not fail to plant an orchard this very month.

“Let the thoughts of a crucified Christ,” said one, “be never out of your mind.” Let them be your sweetness and consolation, your honey and your desire, your reading and your meditation, your life, death, and resurrection.

### Nine Days on a Gun Boat—Gun Boat Mound City—A Novel Sanctum—The Armament and Arrangement—Our War Experience.

ON BOARD GUN BOAT MOUND CITY,  
Mississippi river, at Siege of Island No. 10. }  
Wednesday, March 18, 1862

The readers of the FARMER must excuse us for giving them a chapter of active war news in place of the usual agricultural subjects. To write of the culture of the soil, amid the booming of cannon, the loud bellowing of the huge mortars, and the excitement of the siege, which is now in progress in its fifth day, is out of the question. We will, therefore, draw on our note book for the past five days.

#### THE MOUND CITY.

We went on board this boat the 9th inst., and have had an opportunity to learn something of river naval warfare, especially when five days of it have been spent in active service. The length of the boat is about one hundred and seventy feet with a width of fifty feet, tapering but little towards the ends, which present a screw appearance. There is no beauty in the form of these boats; their hulls are sunk to the water's edge, while the gun room on deck is roofed over with heavy oak timber, which, for the most part is covered with long narrow iron plates, say an inch and a half thick and eight inches wide. She draws seven feet of water, thus putting her boilers and machinery below the water line, though exposed to a plunging shot from above or through her port holes. The gun deck is six and a half feet in the clear, lighted from above by sky-lights. What with port holes, plunging shot and sky-lights for the ingress of stray shot, we do not consider this so safe as our own sanctum, for while writing a stray shot may enter one of the forward ports, from which the iron messenger of death are now being sent to the enemy, traverse the gun room, lay waste the slight partition of the ward room in which we now write, and cut short our scribbling. Yet this has been our *living room*, located within range of the enemies batteries for the past four days. Our dependence is not so much on the solid defences of the oak and iron as upon its ability to glance off the balls, and thus turn them harmless from their course. A conical shot from an eight inch rifled cannon at a mile range, should it not glance off, would pass through this iron sheeting and band of solid oak as though it was pasteboard. Our safety then, depends upon the glancing of the shot.

On the bow of the boat are three guns, the right and left ones, or as the sailors call them, port and starboard guns, are seven inch forty-two pounder rifled coast guns, throwing a conical shot of eighty-four pounds, and shell of about seventy pounds. Their range is over two miles, and weigh eight thousand six hundred and thirty-six pounds each. The middle gun is an eight inch columbiad and weighs six thousand and three hundred pounds, throwing a solid shot of sixty-four pounds or round shell of fifty three pounds. The two forward side guns are also seven inch rifles of the same class, and the two next eight inch columbiads as above. The other six guns are thirty-two pounders, weighing four thousand and two hundred pounds each. On the upper deck is a twelve pound brass mountain howitzer, for throwing grape and shrapnel. For close quarters there are fifty muskets, seventy sabres, forty-five boarding pikes, fifty navy revolvers, and several pieces of hose to throw steam on any unwelcome visitor. The working force of this craft, in men and officers, numbers one hundred and eighty. A charge of powder for the rifles is thirteen pounds, for an eight inch columbiad, eight pounds, and the thirty-two pounders, six pounds. The boilers are in the centre, the engine just back of them and the wheel next, leaving space at the stern for the Captain's room, and the wardroom for the officers. The wheel is thus well protected, for these two rooms are each graced with a thirty-two pounder, a piece of furniture often more useful than ornamental. The officer's berths are on each side of the wheel, leaving a narrow passage back to the cabins, while the non-commissioned officers have their dining and sleeping rooms over the engine. The cooking is done over the boilers and the men sleep in hammocks suspended from hooks in the beams on the gun deck. It will thus be seen that this space of one hundred and seventy by fifty feet, is pretty well filled with men and implements, and nothing short of the strictest discipline could keep things in anything like order. Yet all goes like clock work. Every part of the vessel is clean, and no offensive smell comes forth to disturb the olfactories. The men are clean, their clothes never get sour by long use without washing; the food is abundant and good, and always well cooked. Dr. Jones, the surgeon, keeps a sharp eye on the sanitary condition of the men. Soap, water, healthy food, good cooking, and clean decks are his especial favorites, rather than the medicine chest. The result is, there are but three men off duty, and one of them from a fall. The hull of the boat is in eight

water tight compartments, and as it is out of the reach of shot, there is little danger of sinking.

The officers are:

A. H. KILTY, U. S. N., Lieut. Commanding.  
 W. A. STEWART, 1st Master, Cin. O.  
 C. DOMING, 2d " Peoria, Ills.  
 J. H. KINZIE, jun., 3d " Chicago, Ills.  
 WM. HARTE, 4th " Rock Island, Ills.  
 GEO. E. JONES, Surgeon, Cin. O.  
 JOHN M. GUNN, Paymaster, Anna, Ills.  
 JAS. C. CANIDA, Pilot, Cin., O.  
 CHAS. B. YOUNG, " Cin., O.  
 JOHN COX, Engineer, Cin., O.  
 JAS. A. SCOFIELD, Master's Mate, Chicago Ill.  
 HENRY R. BROWNE, Master's Mate.  
 THOS. McELROY, Acting Gunner.

When we look upon these men, all in good health, yet huddled together, we cannot avoid the conclusion that, bad food, poor cooking, filth and neglect, have a large hand in diminishing the ranks of our land forces. The shoulder strap disease is more to be dreaded than the enemy's bullets. Deliver us from the annoyance of big-headed officers, who think more of their own vast importance than of the comforts and good health of their men. When the history of this war is written, thousands of officers will sink into puny insignificance, and their shoulder straps will go out of sight. The wail of widows, of orphans, of fathers, mothers, sisters and brothers, will ever sound in their ears, and they will ask the rocks and hills to fall on them. The country press will some day teem with these small histories of these small minded men, now so inflated with their position. Just take a look at this gun-boat crew, composed of three classes of men: 1st. Old salts from the east. 2nd. Lake men from Chicago. 3rd. River and lumber men from the north. These have been laying idle for months waiting for the boats to be ready for service, and yet but three of them are slightly indisposed and off duty. Did the officers of the land forces use the same care as is here daily experienced, a like result would follow.

The company in the ward room, consisted of nine officers, Mr. J. B. McCullagh, of the Cincinnati Gazette and ourself. The pilots and the two last named lodging in the pilot house, a strong tower near the forward end of the boat. The sailors have grog, that, is Ohio whisky, several times a day; but during our stay on board, no intoxicating drinks were used by the officers. The navy regulations provide for the men, though a large number of them prefer the four cents a

day to the grog. We were on board all the gun boats, and so far as we had an opportunity to judge, the strictest temperance prevailed among the officers. Thanks to the example and influence of Com. Foote and the good common sense of his officers. Such men have and will succeed. The greater the obstacles, the more they will rise above them, and the strongholds along this great river, will one by one yield to their untiring perseverance and steady skill. They will be careful of the lives and health of their men, so as to return them to their friends and families, to enjoy the rewards of a great victory.

On Monday at 1 p. m., the 10th inst., the gun boat Mound City, steamed down the river to Columbus. The river was high, and the bottoms generally submerged. The farm houses along the shore are sorry looking things, many of them standing in the water, and none of them out of the reach of the flood that is gradually rising. The first high land is the high bank at Columbus, twenty miles from Cairo. Upon this bluff is located the "Gibraltar of the West," but Gibraltar no longer; the earth batteries are now harmless, and the sound of national music comes over the waters from loyal men, instead of the rebel hoards that so lately held high carnival.

Our good boat lay here two days, giving us enough time to look over the fortifications. In all deference to military men, we say the point was a weak one against attacks from the river. The forts being in line, the huge mortars would have done sad havoc, for scarcely a shot would have missed, doing more or less damage. The high perpendicular bluffs of ocean silt would have crumbled and made immense land slides, with the undermining process of shot and shell, carrying the upper batteries down a hundred feet to fill the lower or water batteries with the avalanche of loose earth. The magazine would have been closed at once; even without this aid it must soon be buried beneath the debris of the crumbling bank. Nearly all of the heavy guns were taken away for the defence of Island No. 10. Six only of the largest size are positively known to be left, though it is supposed that several are now lying in the river. An immense quantity of round shot are in the works. Had the same amount of labor been expended along the river in throwing up mounds to secure the farms and the stock from being washed off at high water, as is here expended in ditches and embankments, thousands of happy homes might have smiled out upon this great highway of nations, instead of the desolation that now reigns along its solitudes.

On Friday morning, March 14th, the Mississippi fleet came down to join us, and left for Hickman at 3 p. m. Commodore Foot had his Pennant on board the BENTON, which put off, followed on the right by the Mound City, and on the left by the Cincinnati, in the rear, the St. Louis, Pittsburgh and Carondelet, iron clad boats, and the wood boat of four guns, the Conestoga. This last is a side-wheel steamer of great power and speed. The Judge Turner came next with an immense load of mortar ammunition, and the Great Western with similar stores for the gun boats. To these add a large number of transports with mortars in tow, stores, men, infantry, artillery and cavalry, and you have a grand and imposing sight. The dark low hulls of the gun boats, with their huge guns frowning from their sides, from stem to stern, leading the way, and followed by miles of these floating palaces, so lately engaged in exchanging the products of the north for those of the south, but now filled with the dread implements of death and destruction, is a picture for the artist, a study for the philosopher, and to the lover of the flag of our country, which floats over those waters for the first time in several months, a harbinger of joy.

Arriving at Hickman, white flags, white sheets, and white cloths of every description were waved from the windows and balconies of the Union loving, and doubtless others who would like now to be counted as such.

March 15th. At six o'clock this morning, the signal was made to follow the lead of the flag ship. The wind was from the north-west, cold and brisk. The boats were cleared for action, the guns loaded with shell, sabres and pistols strapped on, pikes laid ready, and every man at his post—the sound of the escaping steam broke the stillness of the river solitude. Women and children came out of the rude houses, that appeared here and there amid the waste of water, and gazed with open mouthed wonder upon the imposing novel display, doubtless wishing that their fathers and brothers were at home and free from any hand in the war. No waving of white handkerchiefs, but a sullen gazing at the moving panorama. Coming around a bend in the river, a small armed steamer lay at a woodyard a mile distant, but with steam up ready for a start. She wheeled into the swift current, and before the guns of the Benton could be turned on to her, she was out of reach, and with her shrill whistle gave the note of warning to the foe at Island No. 10, now three or four miles distant. The fleet

arrived two miles above the upper batteries of the rebels, planted on the Kentucky side of the river. An immense number of tents lined the shore for nearly a mile and a half, while the island was almost entirely covered with the white dwellings of the soldiers. Batteries along the main land in the semi-arch, formed by the bend of the river and on the island, showed the dogs of war, frowning with their dark shadows over the well made battle works. Here then is the Gibraltar of the west, the gate that must be opened to permit this fleet to reach the waters of the gulf. Eighty cannon of the largest calibre, with several gun boats, backed with an army of twenty thousand well armed soldiers are to try the fortunes of war, with less than four thousand that compose the force to attack them.

The Commodore has decided that no rash attempt should be made on this stronghold, but that with the large mortars and long range rifle cannon, he will reduce their works one by one. This will, of course, occupy some days, but in the saving of the life of our men, make a full compensation.

During the afternoon, the Benton dropped down to reconnoiter the rebel position, and threw forty-three nine inch shell at the upper rebel battery, while they obtained three shots in reply.

During the afternoon, the mortars commenced their practice, and threw thirty-two thirteen inch shell into the several camps and batteries, by way of feelers.

The weather was cold with a drizzling rain, in keeping with the place. The river, which for several miles has a south course, here takes a sudden turn to the north west, and a half a mile below the point of land that forms what is called Point Donaldson, is the head of Island No. 10, and not as is represented on the maps in the bight of the point. Opposite the island on both shores land is cleared and cultivated, and there is one farm on the island. On the Missouri side there are four families. The one farthest from the batteries and out of the reach of rebel guns and above the track of our mortar shell remains; the others left so suddenly that they took nothing but their wearing apparel with them. Some two hundred half grown hogs, and a few head of cattle were left to take care of themselves. The hogs and pigs are being put to use, the chickens have ceased to crow, and some thoughtful soldier pulled down the corner of a corn crib to give the starving cattle a chance to live. The houses are of logs, and possess few

luxuries. The nearest approach to this which we saw, was a cottage bedstead, worth some six dollars, and a large looking glass of about three dollars; these made a strong contrast with the rough interior and rude comforts of the house. The only school house that we saw after leaving Cairo, except at Columbus and Hickman, was a few miles below the latter place on the Kentucky side, and near this were three men, the only ones that made their appearance. We doubt not that a Union sentiment yet lingers in that neighborhood, for country school houses and secession can never go together. Nothing like a newspaper or books were to be seen in the deserted houses, nor do we think one of the inmates could read them if there had been. New Madrid, distant two miles, is their place of market and general headquarters for news.

These river families must lead a miserable life, subject to annual overflows, when their stock of hogs and few head of cattle are often swept into the stream; and around them for miles, nothing but the wild sweeping current, surging through the interminable forest of cottonwood, sycamore and water oak, and holding them close prisoners for weeks. No school houses, no mails except at the large towns; no newspapers—education to them is a hidden mystery, which they have not the ambition to unlock, to partake of its wealth. Isolated from the world, they live in lazy ease, hunting, fishing, and occasionally cutting a few cords of cottonwood for the steamboats, to exchange for whisky and other needed articles. As this river soil will not produce pasturage, milk and butter is almost out of the question. The cattle are a miserable, scrawny breed, and the hogs of the long-legged kind. A hog that weighs two hundred pounds is considered large. The soil is excellent for corn of which they grow good crops, but from their indolent habits, the fields are small. On one of these farms is about two thousand bushels, and on another about half that amount. The third farmer had sent all his corn south, and just received in return a hog-head of sugar and several barrels of molasses. These formed a rich treat to the sailors and soldiers who took charge of them. We were told by a farmer, who resided some three miles down the river, and whose married daughter was the only female housekeeper remaining here, that these four farms were the most desirable and valuable of any for a long distance up or down the river, and their owners the most well to do. If this is so, we have no desire to divide the comforts and luxuries with these river farmers for any length

of time, and most especially during the long months of the mosquito infliction. It is an old proverb that "one half the world do not know how the others live," and certainly the outside world know little in regard to the doings among these river sweeps, cut off from their fellows by cypress swamps, deep bayous and long tangled forests of cottonwood. The earthquake of 1812, that sunk the village of—a few miles to the west, has left its traces here. Island No. 10 was in that convulsion, cut off from the main land and the Mississippi, induced to take the new channel through the valley sunk by the unseen power. The motion of this remarkable phenomena was from east to west, settling the earth in parallel valleys, now forming long bayous that reach for long miles into the country, and render it almost uninhabitable. If the deep toned thunder of the earthquake gave warning of God's wrath, sinking whole villages and farms into the deep recesses of the bayou, no less disastrous to human life are the bellowing of these monster mortars, which make the earth vibrate for miles, and whose deep tones are heard in a radii of sixty miles. They fly through the air in graceful circles, with an unearthly scream, "and wing a death to rob a tomb." We have seen them drop into the rebel camp amid the tents, shutting out the sight by an immense cloud of dust and smoke, and doubtless sending many of the rebels to their long homes. Again they drop into the enemy's batteries destroying everything but the big guns, but here the men flee to the casemates and receive less injury. Sometimes they go beyond the range and fall into the forest, from which come the booming sound of the bursting shell, and a column of smoke rises high above the trees. Others burst in mad career nearly half a mile high—a bright flash like chain lightning; the sudden forming of a little cloud, which sails gracefully off in the direction of the wind, retaining its form for hours. Looking at the surface of the river at the sametime, innumerable jets of water go up, to mark the spot of the falling fragments. Some times they burst just over the devoted works, and at others, sink deep into the yielding soil, and bursting, send a column of mud high into the air. Were it not for the death and destruction that mark their explosion, we might look upon them with pleasure. As it is, they are to us a matter of awe, of wonder and admiration, at their unearthly sound and destructive power—of wonder that such a huge body can be hurled through the air for so long a distance by the force of such

simples as carbon, sulphur and nitre—each so harmless in itself. Of admiration, that the genius of man is capable of constructing and commanding such a mighty foe,—the graceful circling of the monster shell as it sails through the air, looking no larger than a good sized marble, bursting into a thousand fragments at the will of the gunner, and sending back its thunder tones.

Standing just back of the guns or mortars, the flying shot can be seen for a long distance with the naked eye, but shot coming toward you are invisible, and when you hear the sound, it is too late to dodge, though most persons involuntarily go through the motions.

SUNDAY, MARCH 16.—The wind still continues N. W., though the weather is more spring like. At a quarter past eight, a steamer came up past the island to the lower land battery, but a well aimed shot from one of the Benton's nine inch Dahlgren guns, sent her afloat, and she disappeared below the island. Soon after a white flag was waved from the upper battery, and Com. Foot sent one of the tugs with a flag of truce to enquire its cause, but was informed that they were signaling their own boats below. The tug returned, and at once the Benton opened a damaging fire on the battery, which hauled down the white flag and run up the stars and bars.

The firing continued brisk through the day, but the rebels did not reply until near 5 o'clock, and then with only three shots. To-day the mortars threw two hundred and eighty shell, and the Benton fifty. In the afternoon, Col. Buford tried the effects of a battery of artillery on the lower part of the Island, but without any damage. The enemy returned a brisk fire from a thirty-two pounder, mortally wounding one man. The troops under Col. Buford are the 27th, and 24th Ills., and 15th Wis. The Mound City had been directed to take up a position at the Point to protect the mortar boats, and was distant one and three-fourth miles of the upper battery, and within range of fire of the enemies batteries.

MONDAY, MARCH 17.—We have occupied so much space already, that we must close. This was the great day thus far—the weather was spring like. At 9:45 the rebels fired two shots at us, they having become impatient of our delay. The Mound City was swung round with her head down steam, and fastened to the shore with a large hawser. At 10:30 A. M., the first mortar shell was thrown, and soon after the Mound City sent her first shot at the enemy. She has one of the best gunners, Mr. McElroy



who seldom fails of making his mark. Mr. Dominy, the Second Master, made some capital shots also. The Benton, Cincinnati, St. Louis, Mound City, and Carondelet, took part to-day, firing nine hundred and sixteen shots, and the mortars some three hundred shots, in all, over twelve hundred shots.

In the afternoon, the enemy opened rather briskly from five different batteries, but without any serious effect. One shot went through the deck of the Benton, and four others struck the Benton and Cincinnati, wounding one man slightly. The bursting of a gun on the St. Louis, killing two and wounding nine, part of them mortally, was a sad incident of the day. This bursting of guns is a matter of almost pure carelessness in not ramming home a badly fitted shot or withdrawing it in case it can not be driven to its place. The danger is mostly with rifled cannon, and conical shot, with heavy projectors to fit the grooves.

The constant thundering of the guns, the clouds of smoke, the bursting of the shells, put one in mind of pandemonium; a scene, in itself, grand, sublime, and devilish; a repetition that we care not to witness.

When we look upon such a scene, and reflect that the last efforts of the genius of man is here displayed in all its destructive force, that these river solitudes should be broken with sounds like these, it gives us but a poor opinion of the civilization of the age. A few ambitious persons have brought this all to pass, and entailed an almost endless amount of suffering upon the masses of the people. The more we see of the common white people of the South, the more we pity them: without schools, without books, and without moral leaders, they are fast falling back into the ranks of barbarism, and this war, if long continued, will sweep them from the land. If the African is ignorant, he is affectionate and kindly in his disposition; not so of these poor whites who pour out their blood like water at the bid of their leaders.

"Careless for what or whom they fight,  
For despots, slaves, for wrongs or rights."

TUESDAY, March 18.—The day is beautiful; the birds are sending forth their cheerful notes of spring, amid the silver spray that is just beginning to glimmer among the branches of the river forest, and the river, itself, lays like a band of silver between the sinuous belts of cotton wood, as the morning sun kisses its golden surface, looking as innocent as though the spirit of man had never done ought but deeds of kind-

ness along its shores. Upon its surface, here and there, repose the dark forms of the demons of war, ready to vomit forth the flame—

"That wings a death  
To robe a tomb."

Along the river's margin, close under the outstretched arms of the giant denizens of the ever changing shore, lay numerous steamers, filed with armed men, ready for the coming fray. To-day the fight is to be moderate, the unexpected strength of the enemy and his almost impregnable position call for other modes of attack, and some days must elapse before these can be perfected. At nine o'clock A. M., comes the heavy booming of cannon at Point Pleasant, where the enemy are endeavoring to force a passage to reinforce another point.

In company with Captain Sandford, who, with his tug, supplies the fleet with ammunition, we visited the whole fleet. Now and then a mortar sent its compliments to the enemy, who maintained a sullen silence until a little after noon, when one of the transport steamers coming within range, a conical shot came screaming over the water, and landed nearly in the center of a group of some fifty soldiers who were taking their noonday meal, but, strange to say, doing no damage. It would seem that nothing short of some unseen hand guiding this dangerous shot and withholding its explosive power could have made it thus harmless.

Anxious to take a new survey of the Island, with its batteries and the Pelican dry dock, now thoroughly armed and lying on the Missouri side of the Island, we, in company with the reporter of the Cincinnati *Gazette*, Mr. McCulough, strolled down the banks of the river along the farms that front the Island. The day was one of the loveliest of spring days, and naught to mar it but the deep toned thunders of the mortars which had become more active as the day advanced and which had continued their fire upon the Island, and to the shipping beyond, the huge shells went soaring over head, some bursting high in air, some near the shipping, and others on the Island, and again plunging into the deep, muddy waters of the river, sending up a column of spray far above the tops of the trees.

The farm houses were deserted by their tenants, the cattle were taking a holiday at the corn cribs, which some of the soldiers had pulled down for that purpose, the chinks were *non est*, and the swine had nearly all disappeared; soldiers were straggling about, watching the exploding shells, and dodging the shots of a thirty-



two pounder, located on the island about a mile distant; the birds were singing merrily of spring, the opening leaves of the forest that walled in these river homesteads gave a fairy look, the river pouring its muddy current swiftly by, the long belt of primeval forest festooned with grape and trumpet vines, and sprinkled with the green mistletoe that parasite of genial skies, the soft spring-like air, the screaming of the shells as they winged their way to deal out death, the sharp note of the rifled cannon and the deep throttled mortars, all lend an enchantment, a mixture of the beautiful, the wonderful and the fearful to the scene. Slowly plodding on, with glass in hand, now looking at the falling shell, now at the opposing batteries, where we could see the gunners load and fire at our men who had strolled beyond us, and who were in groups of two or three, throwing themselves on the ground whenever the battery belched forth its volley of death, and whose messengers plowed up the ground often in fearful proximity—we pass among these squads of soldiers, knowing, yet not heeding, any danger, when, within fifty feet above, and directly over us, go one of these unwelcome visitors, passing on sixty or eighty rods near the outskirts of the field, it sends up a shower of earth and rests in a grave of its own making. The warning was heeded, and we were soon out of this dangerous position, gaining a position more favorable to a view of the huge iron-clad battery that lay against the shore of the Island, and, as we supposed, out of the notice of the rebels; but being joined by two soldiers with their glittering weapons that flashed back the sun, the mark was too tempting, and without further notice, a thirty-two pound shot gave its significant warning within twenty-five feet of our heads, striking the earth a few rods beyond us. This was enough; the enemy had obtained our range, and reloading the gun and giving it a less elevation—we turned around in time to see its column of smoke curling up, and knew that the messenger of death was after us—the soldiers threw themselves on the ground, while we two members of the press concluded to go, and not to stand upon the order of our going, for but seven seconds is no long time for the ball to speed its way, half of which had already elapsed, and consequently the distance that our willing legs had carried us before the well-known sound added, if possible, to our speed, was so limited that it appeared just at our heels, fanning the prostrate soldiers with its unpleasant breath, and striking the earth within

a hundred feet, making a ditch thirty feet long and at one end three feet deep, where it rested in quiet, looking as innocent as though it had never been set to music by the aid of six pounds of powder. The music of the birds, of the deep forests, the balmy air with its harbingers of spring, the flying shells, the river, all, lost their poetry, and we incontinently took to sober prose, and vowed that the readers of the FARMER should not run another risk of losing their Editor by these dastards. Sending a sailor to remove the shot, which is a thirty-two pounder, we shall lay it in our sanctum as a memento of a moving incident of the siege of Island No. 10. Returning to the mound City, we found her three bow guns busy in leveling the parapet of the upper battery, receiving an occasional shot in return, none of which struck her. The firing continued through the night, one in every fifteen minutes. Our bed, as usual, was laid in the pilot house, just over this music of the rifles, that send their conical shot with a force of fifteen pounds of powder,—no gentle place to lull one to sleep, as with the regularity of the clock the bass notes of our friend Dominy comes up from below—*ready—fire!* followed with a crash that shakes the firm timbers of the ship, and whose echoes reverbrate from shore and headland, and die away in the long reaches of the river.

WEDNESDAY, March 19.—The morning breaks upon us with a dull leaden sky and high wind, lashing the river with foam and strongly contrasting with yesterday. It is now certain that this siege will now continue days if not weeks, we therefore pay our respects to Commodore Foote, and ask leave on the next transport going north. At noon the Commodore's Tug called for us, and while passing around the fleet for the mail, a hundred and twenty-eight pound shot from the enemy plunged into the river within fifty feet of the tug, it having been intended for a transport passing near us. Returning our thanks to Commodore Foote, and the officers and men on board the Mound City, whose kind attentions will always have a green spot in the exciting memories of the past ten days, we stepped on board of the tug Erubus at 1 p. m., bound for Cairo, where we arrived at 10 o'clock, and a few hours thereafter found us opposite our home, with *breaks down*, and conductor Scott handing us our baggage in that happy style that is so becoming when he puts a man of our size off his train, just here when several pair of anxious eyes are looking on with deep interest.

[From the Chicago Tribune.]

## Substitutes and Adulterations of Coffee —Rye Coffee—Chicory—Sweet Potatoes.

CHAMPAIGN, March 25, 1852.

At this time when coffee commands a price that admonishes housekeepers to be very prudent in its use, a very general disposition is manifested to use substitutes of home growth, in whole or in part. The consumption of coffee has increased very materially within the past year, as shown in its sale at our large seaports. A part of this is probably due to its extensive use in the army. At the same time large amounts of other substances have been used. We have seen no statement in regard to the amount of tea used the past year as compared with previous ones, but would suppose a falling off. The increased use of coffee in the west is in part due to cheap sweetening, sorghum molasses being largely used among farmers for that purpose. Among substitutes used in whole or in part, three stand out prominently, and are more or less pulverized, as they are easily grown at all points in the State, and valuable for the purpose, or at least among the most valuable, we will describe them at length.

### RYE.

This grain has been very extensively used for coffee, and the consumption in Europe and other civilized countries amounts to some millions of bushels annually. It is oftener used without than mixed with the berry. In our visits to Missouri, we found it used exclusively at all the public and private houses at which we stopped, and in some cases so complete was the metamorphose, with sugar and cream, that some of our companions would not believe that it was not the berry itself. Where the grain is plump and has been prepared with two or three washings in hot water, then spread out to dry, before roasting, and mixed in liberal quantities with well prepared coffee, it is many times difficult to determine the cheat. If the rye is not washed in boiling hot water, there is an unpleasant taste about it that at once leads to its detection. Rye grown at the west, or at least that on the prairies is the most valuable for coffee, as it is destitute of *ergot* or *rye-smut*, which is often found in this grain at the east, in such large quantities as to render it unfit for food, much less to drink. Persons purchasing rye to be used for coffee should be careful to get that grown on the prairies. The grains will not be as large or wide as that from the timber lands of the north, but it will be free from *ergot* (*cornutem*.)

Rye thus selected, scalded, and otherwise properly prepared, makes a very good substitute, or rather, it makes a palatable and healthy drink with the morning meal, but of course does not contain the valuable properties of pure coffee. Rye is probably the cheapest and the most extensively used as a substitute for coffee, of all other substitutes combined.

### CHICORY (*Cichorium Intybus*.)

This plant is largely cultivated in England, France and Belgium, for the purpose of adulterating coffee, and is also often used wholly for coffee. It is shipped in large quantities from those countries to the United States for this purpose. When properly prepared and used alone, it makes a palatable drink, resembling coffee, with a somewhat distinct smell of liquorice. People accustomed to its use become fond of it. It is certainly better than nine-tenth of the coffee served up at the hotels.

It is simple in its preparation and less liable to damage in roasting. Certainly well prepared chicory is to be preferred to over roasted coffee *a la hotel*. Chicory is easily cultivated, and every farmer can grow it at a trifling cost. It is grown in this neighborhood by several parties, and is used by some farmers almost exclusively for coffee. It ripens its seed in September, of the second year, and is in use as early as July. The roots are washed and dried in an oven, roasted and ground, packed away and drawn upon as needed for use. The plant grows two to three feet high. Those who wish this substitute for coffee need be at no further expense than a paper of seed, and a few hours work, to produce an abundance, in fact. It will seed itself in the garden borders, though of course the roots in that case would be smaller and of less value. Chicory and peas are the substances used by coffee roasters in our large towns with which to adulterate coffee. The pea bug has of late years nearly ruined the pea crop for this use, and the chicory has been mainly depended upon for this purpose. This root adds to the apparent strength of the berry, and in this respect is considered economical. But there is little of the roasted and ground coffee sold in shops that is not more or less adulterated with chicory. We do not know whether an adequate supply of this plant is as yet grown in the United States, but it is certain that its culture is becoming quite common. From its ease of culture, the roots can be afforded at a cheap rate and should be grown at home. As it is so extensively used, some of our gardeners should supply the demand and no longer depend upon the East or our neighbors over the water for a supply.

In the countries named chicory is extensively used for green fodder for soiling, and it is little effected by drouth, would doubtless prove valuable in the south part of the State. When it is cultivated for fodder, it is sown in the spring with oats, at the rate of four or five pounds of seed to the acre. It also makes a good salad the first year, as its broad tapering leaves contain a milky substance, with a bitter taste, and is considered valuable as a diuretic and to re establish the appetite. It remains in the ground through the winter like the parsnip, and its roots are used the second season for coffee. These are washed, cut in thin slices and dried in an oven. The pieces are then browned to the color of coffee, ground and packed away for use. Nearly all of the best old Java, sold as ground coffee, contains about one fourth of chicory. We have purchased pure ground Java, but have oftener found it mixed with chicory.

As chicory will continue to be used for the purpose of adulterating coffee, and as it is valuable for salad and will probably prove valuable for

green fodder in the south part of the State, we would call special attention to it. It can be sown at almost any season of the year, but the spring is the best and the roots will be stronger and produce better crops of foliage. The leaves are two to four inches wide and average one foot long. The flowers bloom for a long time, every morning, and shut up before noon; they are of a pale blue color. The soil must be deeply mellowed, as the roots are long. Ten thousand pounds of dry roots may not be considered a large yield, which, at two cents a pound, would pay a handsome profit over the cost of culture, drying, roasting and grinding.

#### SWEET POTATOES.

For a long time the sweet potato has been used among our hoosier neighbors as a substitute for and with which to adulterate coffee. For this purpose the small tubers are used; consequently the cost is the picking up, drying, roasting and grinding. In this respect they are treated like chiccory, and used in equal quantity with ground coffee. Many persons prefer the flavor of the new combination to that of the pure berry, and so complete is the disguise that few persons would detect the adulteration. There is a richness added to the coffee that pretty fully compensates for the want of all coffee. For some weeks we have been using this substance, and must say that it is so near the pure Java that we have no particular choice between them.

The potatoes were sent us by J. W. Tenbrook of Rockville, Indiana, an extensive grower of this vegetable. We do not suppose that full grown potatoes kept through the winter for seed, could be economically used for this purpose; but in the fall, when the sweet potatoes are dug, a large amount of the small potatoes can be saved at a trifling cost. Mr. T. says: "I send you from Egypt, the product, (six and a half pounds) of half a bushel of sweet potatoes, which you will please brown to a *light brown color when broken*, grind and use as coffee, mixing one-third to one-half of it with coffee. I would suggest that the Nansemond sweet potato will make the richest and most nourishing beverage, and requires less sugar than other varieties. That the small potatoes can be used profitably for this purpose there can be no doubt. The skin need not be taken off, as it adds to the richness of color. This is without doubt the best and most healthy substance yet used to adulterate coffee. The sample sent you was dried in my heating oven." Mr. T. further says that at the price of potatoes for seed, the dried potatoe could not be afforded at a reasonable price, as only twelve to fourteen pounds of the dry article is produced from a bushel of potatoes, and as these are worth two dollars a bushell, the dry product would cost nearly as much as coffee, and therefore this substitute is not at present available, unless the potatoes are furnished in Kentucky, dried and sent north. From trial we can recommend this substance as valuable to mix with coffee, and all farmers growing sweet potatoes can make a saving of the small tubers, before useless. These can be dried in an oven, roasted, ground and packed away in boxes or jars ready for use.

Mr. T. also suggest that these small potatoes could be prepared in the same manner as the Irish potatoe and used as food for our soldiers and for emigrants to California. These two uses should stimulate the culture of the sweet potatoe, so that it should be as common in our gardens as the beet or parsnip. In this neighborhood are several families who for years have been in the habit of drying the small roots of the sweet potatoe for the purpose of mixing with coffee, not so much for the purpose of saving the cost of the coffee, but, as they aver, that it adds to its richness. The Nansemond is a cream-colored yellow potatoe, rich in sugar, and the most desirable for the purpose. It is also best adapted to this climate, and is both hardy and productive.

With coffee at twenty-five to thirty cents at retail, and tea a dollar to a dollar and fifty cents, it is natural that adulterations should be used more largely than usual, when we take into consideration that at twelve to fifteen cents the coffee roasters have used hundreds of tons of peas and chiccory annually, and of course will at this time make no abatement in their efforts. Next Autumn the farmer can have an abundant supply of the sweet potatoe and also the young plants of the chiccory, and the following season in large quantity for sale, at a price that will pay a good profit and beyond competition. Thousands of dollars can thus be saved to our farmers that are now sent abroad.

The careful housewife who roasts her own coffee can easily appreciate the difference between that and the substance that her husband brings from the grocery ready ground, composed of coffee .2, peas .4, and chiccory .4, or one-fifth pure coffee. Barley, oats and corn are also used for coffee, but are of so little value compared with those named above that we will pass them by.

RURAL.

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—The following sign on Western Row, Cincinnati, is original. "Kaixs, Krackers, Kandies, Konfeckshennarys, Holesail and Retaile."

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—A distinguished divine, on a certion occasion, while preaching with his usual eloquence and power, said, "Brethern, I sometimes illustrate my subject in this manner:" and putting his handkerchief to his nose, blew a blast loud enough to wake the seven sleepers. That was not the intended illustration, but some of his hearers thought it was.

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—A young medical student, who had been screwed very hard at his examination for admission to the faculty, on a very warm day, was nearly overcome by the numerous questions put to him, when the following query was added: "What course would you adopt to produce a copious perspiration?" After a long breath, he observed, wiping his forehead "I would have the patient examined before the Medical Society!"

### How we like to be Humbugged.

It is a well established fact that the farmers, as a class, like to be humbugged, nor is this disposition patten to them alone. In the ways of trees, and especially new varieties of fruits, seeds of all kinds, and flowering plants, all classes of planters, whether farmers, mechanics or professional men, are prone to the same. As evidence of this we can adduce annual proof, running back to where the memory of man knoweth not to the contrary.

It is now about twenty years since the reign of humbug commenced and took deep root in this State. The first efforts in that line have since been called gigantic swindles and for a time completely surfeited the people, and real progress stood aloof and paralyzed for fear of again touching a humbug. We allude to *Morus Multicaulis*, that was to produce silk in such abundance that cotton, wool, and flax, were to become matters of history, and it was said that Barnum had specimens of these preserved in glass cases to hand down to posterity, to show what coarse, common fabrics the old folks had used themselves with. The next in order was China Tree corn, so profitable that each stalk produced four ears at the usual place and ten more where the tassel should be. And to these the Rohan potatoes that produced such wonderful crops, and so delicious withal that famines and short crops would never again sadden the family of man. A ten acre farm belted in with the *Multicaulis* would furnish the silk for the largest family—a few acres of the corn and potatoes would fatten the beef, pork, chickens, and furnish food for the family, and henceforth labor should go on a bender, and we of the north should experience the lazy, happy condition of the inhabitants of the tropics, yet enjoying the cool, healthful zephyrs of the north. Since that time we have had numerous minor humbugs, such as Charter Oak grapes, Chinese Yam, Rocky Mountain corn, squashes, *ad infinitum*, Hungarian grass, Bakara clover, etc., etc. We have also had a good run of French flowers sold through the country by *Jean Craps*; grass pinks picked up in our village at fifty cents a dozen, just as "*specimens to send to bonny France for zer gardeners to laf over,*" but sold at the next village as rare carnations with flowers three inches in diameter, at the moderate price of two dollars a plant; lilies more beautiful than those in which Solomon was arrayed, at a dollar and a half, and thus through the whole list of plants, our French Jew pocketing thousands of dollars for plants that had

never been out of the State, but gathered up from the humble gardens, baptised with an unpronounceable French name, and instantly down went the dust. Occasionally a person stood aloof eyeing the voluble stranger with distrust, but the great mass attended the daily sales with a zest that pleased the vendor, and gardens that had never been graced with even grass pinks, forget-me-nots, red peonias, balsams and four o'clocks, were redolent with these, with French names of portentous length and aristocratic significance. The old blush and cinnamon roses, came in for a share and commanded from two to three dollars a slip. The old grass pinks and garden roses, with their congeners, were kicked out of the garden or given to some country cousin, so that they could give place to the French flowers that were soon to make gay the grounds of our city and village friends. But, alas! a few months and the illusion vanished, and Mr. Jean Craps was called by all sorts of naughty names. It was then seen how our small traveling trunks could hold such an immense stock of plants, for that was before the day of railroads, and staging over the prairies in April was no slight task, and yet like the widow Cruise's oil jug, the trunk was never exhausted, and when he left Chicago as the last point on the prairie to return east, his his stock was as ample as when he landed at New Orleans in December. Great is humbug and great is the confidence of the people in strangers who have a supply of the wonderful. About this time some of the Atlantic nurseries which had become plethoric with out-of-date plants, scrubs of fruit trees and all manner of trash, were emptied of their contents on the prairies of the west, *all under name—mixed or miscellaneous.*

While this occurrence was taking place, the "Old Doctor" was busy stocking his garden at "The Grove" with both the beautiful and the useful. With our innate love of flowers, cultivated by extensive toil and personal experience, we gathered up the floral gems from all the reliable nurseries of the east, and while he sold fine rose trees to some at twenty-five cents, the people were filling their grounds from the bags of peddlars with all manner of trash at from two to eight times this amount. This game of tree and plant swindling is about played out on this side of the Mississippi, and has passed over to the hither side, and our friends thereaway are going through the same process of incubation; the Frenchman has turned Yankee, and is now dealing altogether in the *reliable*. A letter from a

farmer in Iowa says: We have near here a nursery of 100,000 saleable fruit trees, 15,000 grape vines a large stock of the most superb evergreens, with other valuable shrubs, trees, and plants, to match, and though he sells apple trees of varieties that have been proved the best adapted to the climate, at twelve dollars per hundred, yet the tree peddlers sell all kinds, whether valuable or not, and obtain twenty dollars a hundred. Concord Grapes, that the nursery furnishes at four for a dollar, sell at one dollar and a half each, and while the evergreen stand in the rows unsold at three for a dollar, the peddlers sell hundreds at from one to two dollars each, and in most cases worthless from exposure in the boxes, as it is well known that the least exposure of the roots of evergreens, prove fatal to the tree. Dwarf apples at fifty to seventy-five cents, that the nurseryman is throwing out of his rows as worthless in this climate. This is only fireside talk for your private ears. It is too great a shame on our people to speak of it in public, as I trust that such gross ignorance of the value of trees in a reading community like this, must soon come to an end, and our farmers and others wake up to their true interest. It would appear that a nurseryman, like a prophet, is not without honor save in his own country. Can you tell us how long we must thus be inflicted?

We can only answer that time alone will cure this tree mania. Why, bless your dear soul, hundreds of thousands of trees from the river nurseries of Iowa have been sold in all parts of the west as Eastern trees. A half a dozen men residing in Illinois or otherwheres, enter into an agreement to sell trees; they get up a catalogue headed the "Rochester Nurseries, by J. Jones & Co.," or the "Dayton Ohio Nurseries of John Frank & Co." With these catalogues they travel for orders, in the meantime one of the number looks after the trees to fill the orders. An Iowa nursery is purchased to supply the apple trees and other standard fruits, which are labelled to suit the wishes of customers; a row of Rambo or Sweet June going out under twenty different names. The ornamentals are procured, in most instances, further east, sometimes at Rochester or Syracuse, the orders are duly packed—marked to destination with the imposing label "From Rochester Nurseries" or "Dayton Nurseries" as the case may be. Some of these packages go to the next station, some of them to the same village, and others longer distances. Central and Western Iowa thus purchase thousands of dollars worth of Iowa grown trees, while Missouri, Kan-

sas, and the river counties of Illinois, come in for a share. The tree peddler is not confined to the east, for we have a good supply of them here, and we believe that the largest number of this class of petty swindlers are residents of the west, and deal largely in western trees.

There is another class of men for whom we have more respect, and those are the agents of reliable nurseries both east and west. These men receive a commission in most cases and sell at regular prices, and the principles are responsible for the correctness of the varieties sent out.

To return to other humbugs, the war has furnished such ample scope for this class of persons, that they have almost ceased to prey upon the planting public. New grapes have lost their attraction at five dollars, and brabdnay strawberries are running to waste. A fizzle on tree cotton, a faint effort with Illinois coffee, and we must wait the close of the war for a new growth of humbugs.

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MEDICAL EXAMINER, Chicago, \$2 00. This is a valuable work to the medical profession; we will not say regular for that point is claimed by the several parties of the day. Prof. N. S. Davis and Frank W. Reilly, editors. A monthly of sixty-four octavo pages, embracing a great variety of valuable information to the practitioner.

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ARCHITECTURE.—G. P. Randal, Architect of Chicago, has placed on our table a pamphlet containing a large number of elevations of buildings lithographed in that city. Now-a-days no buildings of any pretensions is constructed without the aid of the architect, and the result is a decided improvement in our style of building. Our well to do farmers would do well to consult them oftener than they do in the plan on contrivance of their homes.

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On the first of April there were ten prize vessels at Key West awaiting trial.

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Be shure you are right, then go ahead.

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MODERN DEFINITIONS.—Oversight—to leave your old umbrella in a hall and carry away a new one.

Unfortunate Man—one born with a conscience.

Progress of Time—a peddler going through the land with wooden clocks.

Rigid Justice—a juror on a murder case fast asleep.



[From the Country Gentleman and Cultivator.]

### Bad Advice About Seeding.

A correspondent of the *New England Farmer* says that a farmer of Canterbury, New Hampshire told him some facts which had led him to think that he had been seeding his land too much, especially, as it was very strong. In laying down nine acres to grass in the spring, he sowed oats, at the rate of a half bushel to the acre. The result was five hundred bushels of oats from nine acres. Also his wheat, when sown thin, filled better, and yielded more.

MESSRS. EDITORS—So far from subscribing to the foregoing which appeared in your paper of the 27th of February, I have seen for some years increasing the quantity of seed oats, and now never sow less than three bushels and generally four. If the land is very rich, moist and abounding in vegetation mould, I sow still more.

Formerly when I sowed two bushels to the acre I was glad to obtain a yield of thirty or forty bushels, and frequently got less—the straw full of weeds and badly lodged. Now I get without difficulty from fifty to seventy bushels; am never troubled with weeds and seldom have it lodge.

This sowing of half a bushel of seed to the acre may do down in "Canterbury," but no where this side of there I fancy.

Fearing that silence might be construed into an approval by the whole agricultural world of what I consider so great and dangerous a *heresy*, I wish to place on record my protest.

In England, I believe the usual quantity sown is from four to six bushels—but in this country from three to four is probably sufficient. My observation and experience teach me that the quantity of grain and grass seed sown is generally too little—seldom too much.

I. D. G. NELSON.

*Elm Park, near Fort Wayne, Ind.*

From the Chicago Farmer's Advocate.

### Sprouting Red Cedar Seed.

A correspondent asks "how to sprout red cedar seed." There are several methods. One is to place the seed with sand soil in boxes, thus keeping them for a year and then planting in nursery rows. The resinous case that envelopes the seed is acted upon quite slowly by moisture and warmth, and the seed itself is coated by a flinty shell. They have been sprouted the first spring by bruising and mixing with ashes, in which they remain about six weeks and are then planted. It is difficult to sprout them, but even more so to raise the first and second years on the prairies, so subject are we to drouths. Yet with care it can be done. A mixture of one-fourth sand with the soil, and mulching are necessary. As a general thing—except in the way of experiment when one has seed of his own—it is best to get evergreens of nurserymen, from nine inches to two feet high.

The Norway Spruce, if not the most handsome, the hardiest of evergreens can be obtained from nine to fourteen inches at the rate of forty dollars per thousand. To one who understands the

nature of evergreens there is little danger of loss. Put in nursery rows, and well tended two years they will be ready for planting in their permanent places. Evergreens are transplanted in the nursery with as much confidence of their living as deciduous trees. The great secret is in preventing the roots from drying. The roots of an evergreen exposed one hour to the wind and sun will kill it. Prevent that, and there is no danger. I trust the people will inform themselves more of the nature and method of rearing evergreens, for next to the orange, they are of most importance to the prairie farmer.

H. B. RANKIN.

*Prairie Home, Ill., March 18, 1862.*

### Strawberries.

The strawberry patches that have been covered during the past winter, should now have the covering raked off. Those treated in this manner will look nearly as green and fresh as when covered last fall, and will well repay the extra trouble and expense of covering in the improved quality, as well as quantity, of fruit in the season.

#### PREPARATION OF GROUND FOR NEW BEDS.

This will vary much with the different kinds of soil, as well as somewhat with the latitude. Deep plowing or spading will be first in order under any circumstances. If the soil be light and sandy, the addition of a well decomposed compost of manure and muck, or clay, will be essential if reasonable crops are desired. If the soil be heavy clay, with a tendency to be acid, a dressing of fresh stable manure, and an application of lime, will often prove beneficial. Most prairie soils need lime. Wood ashes will well repay their application on any land that is to be planted with small fruits.

#### BEDS.

The size and shape in which these should be made, will depend on whether the plants are to be kept in stools or allowed to run. Our preference is to plant in large beds, leaving a space of two feet between the rows, putting the plants one foot apart in the rows, and keeping the runners picked off. This plan gives full opportunity for mulching to protect the fruit from dirt. Finer berries are produced from the fact that each plant has room, light and air. The plants or stools attain a large size, new fruit crowns are developed each year, and the plants last in good bearing condition as long as they are well cared for, and the ground furnishes sufficient nourishment to produce full crops. The only objection urged against this method, is on the account of the expense of keeping off the runners. Yet if the labor of resetting every three years be taken into consideration, and an accurate account of all the expenses on the usual system of letting the plants run together in masses, be kept for a series of years, and compared with the expense of a similar plot kept in hills, the difference in their cost will not be as great as might be supposed. If the plants are to

be allowed to run, the beds should be narrow, and separated with walks, from which the weeding and picking may be done.

#### VARIETIES.

The hermaphrodite varieties are the only ones which have any special claims on ordinary cultivators. Of these, Wilson's Albany is now most widely known, and will probably give for common care, the most and largest fruit of any well known berry. The Iowa is probably the most hardy variety, and quite equal to the Wilson in productiveness. It is disseminated through the country under many names, and wherever planted and reasonably cared for, is sure to fruit well. There are many other varieties which do well, and should claim a share of attention. The most promising of these is the Triomphe de Grand, which has been described in these columns, and which bids fair to become quite as widely known as the two first named varieties. We perceive that from all quarters the attention of fruit-growers and amateurs is being turned to it.—*Chicago Christian Advocate.*

[From the Farmers Advocate, Chicago.]

#### Time to Prune Fruit Trees.

In the last issue of the Advocate, is a paragraph from "Field Notes" on the time to prune fruit trees. The time therein preferred is July. Such, certainly, is subject to many objections.

There is no one period of the year best for pruning all trees. The time and manner of pruning must depend on the object to be obtained by that pruning. The two main objects are the growth of the tree and production of fruit. In a young orchard, or in an old one, where growth of new wood is the main object, winter pruning will produce those results; but if the tree is already too vigorous and of sufficient size to bear fruit, summer pruning should be adopted. By winter pruning, the abundant sap sent up in spring, induces the growth of new wood—the circulation of sap is more rapid and the fruit spurs of most vigor, are changed to branches. Summer pruning by checking the growth at that season, when fruit buds are forming, accelerates the formation of such buds.

Nothing is more common than a tendency to extremes among horticulturists in pruning. Often have I seen orchards crippled and permanently injured by excessive pruning. It appears that some have a pruning mania, and annually cut and saw indiscriminately. They seem to suppose trees should be pruned every year, and at some leisure time—most usually in the spring—set in with ax and saw—cutting without definite object, here a limb, and there another; and not unfrequently we have seen the entire lower branches removed even after trees had attained half their size, thus destroying that balance between the roots and branches which time can hardly ever restore.

Some cultivators err as greatly in another direction, and seldom prune at all. They act on the supposition that nature requires no aid in this respect.

I would never prune heavily at any time, but rather gently and often, and several times during the year, if the object we have in view requires it; but never prune without a definite object.

If trees have been properly cultivated, they will seldom require pruning to promote bearing. It is only when their natural conditions have been changed, that there is necessity to resort to any such measures. If, after proper size, a tree is barren, fruitfulness cannot be attained by pruning only, at any season. A better method will be found in the proper management of the sap. To apply this management judiciously, something must be known of its several conditions, for the same sap that will produce leaf, wood, and bark, by proper management, may produce fruit by changing its conditions.

Every farmer who cultivates a young orchard should not be in so great haste to have trees bear early, as have them of vigorous and symmetrical heads. Premature productiveness is more than counter-balanced by a future enfeebled growth. An orchard should be pruned so frequent that heavy pruning would never be necessary. To allow the formation of large limbs only to be trimmed off, is bad economy.

H. B. RANKIN.

*Prairie Home*, March, 1862.

GRAIN AND STOCK TRADE OF CHICAGO.—We learn that the Messrs. Fairbanks have set in the elevators in this city, during the last year, about seventy of their five hundred bushel hopper scales and several smaller ones. Each of these can be loaded to its full capacity, and the load discharged in a few minutes, which shows something of the immense amount of grain which can be weighed upon them. They have also set, at the different stock yards in the city, five of their stock scales with platforms of sufficient size to weigh a whole car load at once, which must add greatly to the facilities for shipping live stock from this market.—*Chicago Tribune.*

WEATHER AND CROPS.—During the past week we have had a continuation of heavy rains all over this State, as well as in Iowa and other Northern States, and farmers have yet made but little progress in their spring work. In some parts of Central and Southern Illinois the ground is so wet with the incessant rains of the past four or five weeks, that it is impossible to do anything.

Much apprehension is felt in consequence of this with regard to the next crop of Spring Wheat, which, when late sown, is much more subject to the fatal rust and blight than when it is put in the ground early in the spring. The Winter Wheat in some sections looks well; but the cold rains which prevailed last month have damaged the crop very materially in low grounds. The roads are mostly impassable and farmers find it difficult to bring anything to market.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, APRIL, 1862.

### Editor's Table.

APRIL, with its weeping skies and busy plows is of deep interest to the farmers of this State. Since early in March the seedsman has been busy in some parts of the state or other, either in getting ready to sow or sowing. Early in the month we were in Egypt, and found everything unusually dormant; the buds just beginning to swell. Five years ago, on the same sixth day of the month, the ruddy ends of the peach blossoms were just peering forth; but now, it will be two if not three weeks before they will be in the same forward condition. Later in the season it was pronounced two weeks behind time, as a long cold spell had taken possession of the rest of March and part of April, holding the buds in this ho-peep attitude and not allowing the flowers to expand until April. We like these seasons that take a late start; it argues well of a vigorous, onward progress when the signal notes of spring are sent forth. These spasmodic efforts of an early spring are not to our liking. Give us winter, with its band of frost, and then spring with its vernal flora and song birds; no lingering of winter in the lap of spring, or spring attempting to invade the domain of winter.

**TURNER'S CULTIVATOR.**—We learn from a hand-bill issued by Ellis & Shields, of Jacksonville, Edward Y. Eno, agent, that this cultivator is about to appear in a new dress "by experienced workmen and none but the best material used." This will again place this valuable cultivator in favor, which bad workmanship and material had put in the background. We have seen no plan

for a two horse cultivator that pleases us so well as this, and we now hope its course will be upward and onward.

To all market gardeners and large nurserymen, we would particularly commend it. For cotton it cannot otherwise than prove valuable, working as it does so close to the row, for weeds cannot escape its searching teeth. Last year we worked over sixty acres of corn, beans and other small crops, all of which was done in a manner superior to any other implement that we have used or seen. Our protest was the bad make of the implement, wanting durability, and it will be a pleasure to us to certify that this defect is cured.

**HARDY APPLE TREES.**—*Editor Illinois Farmer:* Can you send me six low headed apple trees of good varieties, that are hardy in northern Illinois, or say in this county? I have little faith in trees in this part of the state, but wish to try a few, hoping that with proper attention, they will at least give a small return of fruit.

GEO. B. WOOD.

*Chelsea, Will Co. Ill.*

Had Mr. Wood read the *FARMER* the past year, he would not have asked the above question, but have been satisfied that such hardy varieties exist, but for his own and the benefit of new subscribers, we will name several varieties that we have known to be perfectly hardy, and reliable in Cook county on the open prairie since 1846, a period of sixteen years, and embracing one of the hardest winters for the apple known to that venerable person the "oldest inhabitant." We hope this will stiffen up the faith of not only Mr. Wood but numerous others whose weak faith has deprived their families of this health giving food. To all such we say, go or send to the nearest nursery and before the end of this month, have the trees set out, not less than fifty for an eighty acre farm, more if you can. First in the list stands the Keswick Codlin, which always bears, and is used for cooking from the first of July to the end of September. A dozen trees should be planted on every farm. Early Pennock, for eating, is not so productive but always hardy; ripe the last of August. Red Astrachan, bears alternate years, the first of August. Summer Queen, heavy crop in odd years. For fall, Snow Apple, Late Golden Sweet, Ramsdell's Sweet. This last is the most valuable and never fails of a good crop, the fruit large, showy and desirable. For winter, Flushing Spitzenburg, Stannard, Winter Russet and Winter Bough (sweet.) The above are old personal friends that we know to be always right, at the same time we could name several others

that we have seen from time to time, in which we have confidence, but the above list will make a good selection, at all events. We have five acres of low headed trees three years old, but all of them more or less injured by the hail storms of July 19th, 1861. We intend to set out twenty acres of orchard out of this lot of trees during this month, and as they will be severally cut back in setting, the injured branches will be out of the way. We sell these at eight dollars per one hundred. Hereafter, our trees will all be trained with low heads. We know that the time is not distant when none but low headed trees will be set. Nearly all varieties, (perhaps all) will prove hardy, with low heads and sheltered by belts of trees so as to break off the wind from all directions except the east.

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**THE GROVE NURSERY.**—The spring catalogue of this nursery is on our table, and a card will be found in the advertising columns of the *FARMER*. His list of small fruits, ornamental trees and flowering plants is not only extensive, but the prices are remarkably low. In fact we think his retail price will average as low as any wholesale trade list of the east. Those in want of the beautiful, whether of trees, shrubs or plants, will do well to consult the "Old Doctor's" catalogue.

---

**CHICAGO BOARD OF TRADE—ANNUAL REPORT.**—We are in receipt of a copy of the above through the kindness of Messrs. Hammil & Reynolds, commission merchants, No. 161, Kinzie st., Chicago. It is a pamphlet of one hundred and ten pages, giving a full statement of the trade of the city. Mr. Catlin, the secretary, has shown himself an able officer in the tabling this vast amount of statistical matter. The amount of wheat received last year, was 17,385,002; shipped, 15,835,953. The highest price paid for spring wheat was, May 18th, \$1 30, and the lowest was fifty-nine cents the sixth of July, a pretty wide range within a few days. The former price was paid in *stumptail* and the latter in *gold*, a wide range in the quality of the pay also.

---

**HUMBUGS—ILLINOIS COFFEE—KENDALL'S TREE COTTON.**—Some days since we sent a sample of Mr. Huffman's "Illinois Coffee" to an eminent botanist at Germantown, Pa., to see if he could make out the plant. His answer is before us:

"Your coffee is certainly a pea, very closely allied to the sugar pea, but I do not think I have seen the precise variety before. I will try and grow a plant from the seed, and will then give you its exact name."

"Certainly it is a pea, and no doubt will make a substitute for coffee, as hundreds of bushels of "Java" coffee are now made out of peas. The "Dandelion Coffee," now becoming so very popular, is made entirely of peas. Whether this variety will be better than the "Dandelion Coffee Pea" I think doubtful. As your State society has offered such handsome premiums for the new pea, they should offer one for the old, that they may have a fair and free fight together.

I suppose you know the tree cotton humbug has exploded? (Kendall's plant, though in a warm room when fire was kept twelve hours per day, got killed with frost, as a correspondent from his neighborhood writes me.)

The Illinois Coffee has had a much shorter run. Wonder what will come next? Our people must have something. Any one who "says he knows" is sufficient authority for the value of any new product, and "down goes the dust."

Thus we sail on, one humbug succeeds another in rapid order, and the general appetite appears as fresh as ever. Knowing this, we regretted the premature exposure of our "Illinois Coffee," and we hope the next genius in this line will so lay his plans that he will make a good thing out of it. Alas! poor old Huffman, he might have been made rich, but his star culminated too soon; his good friends the Hon. S. W. Moulton, Cooper and the Hon. Sidney Breese have cut him down, (all unintentionally) just as he was stepping on to the platform of fame, and just ready to grasp success with his toil hardened hands; but such is the fate of genius. Mr. H. is not the first great man spoiled in the making up *sic transit gloria humbug*.

---

**DIED.**—At Dixon on the 7th inst., KATE NEVA, youngest daughter of Wm. H. and Maryanne Van Epps, aged four years and six months.

President Van Epps returned from the late meeting of the board of the State Agricultural Society, at Springfield, to close the eyes of his little darling. We most cordially extend to the bereaved family, our sympathies in their deep affliction.

---

**TOBACCO CULTURE.**—In another part of the *FARMER* will be found an interesting article on the culture of this plant.

**TRIAL OF FARM IMPLEMENTS.**—President Van Epps has returned from Springfield where a meeting of the executive board of the State Agricultural Society was held last week. The next fair will be held at Peoria in September.

The executive board decided to award premiums on reapers, mowers, threshing machines and other agricultural implements only on a test of merit by actual experiment. Heretofore these awards have been made on the fair grounds by committees who could only judge of the merits of the different machines on exhibition by their appearance and unsatisfactory means afforded for their operation on the grounds. It has long been obvious to machinists that inventions of the greatest merit are not always favored with premiums, while the less worthy are thus recommended to the farmers of Illinois and other States to their injury, and the prejudice of other machines. It is obvious to every farmer that the State Fair grounds are no place to test the relative value of farm implements, that must in the hands of the farmer, be put in practical use among the hills and ravines of the prairies, and roots and stumps of timber lands.

The exhibition and trial of machines before the executive committee preparatory to an award of premiums at the State Fair, will be held at Dixon during the coming harvest.

**CORN CULTURE.**—*Clod Hopper* writes us: "Your article on Corn Culture—Hills vs. Drills, is to the purpose. Can you tell me where I can get Prindle's Drill Planter, and its cost? D. R. Prindle, East Bethany, N. Y.

As there is little demand as yet, for drill corn planters at the west, Mr. P. has made no effort to send them west, but as there is a growing disposition to use the drill in connection with the two horse cultivators, it may soon be an object for him to look after the matter.

*Clod Hopper* thinks there is more net profit on five acres of corn yielding five hundred bushels, than on twenty-six hundred bushels at the usual rates. As he does not give the number of acres, we suppose his experience is not of the satisfactory nature. When our friend Clod Hopper grows his hundred bushels to the acre, we shall be pleased to hear of it and the net profits. Mr. C. H. also wishes to know what crops, and in what proportion will pay the best on forty or eighty acre farms. To do this would require more time than is at our disposal at this writing. The most important crop to be planted is a good supply of the small fruits, such as currants,

gooseberries, raspberries, blackberries and especially strawberries. Next an orchard of apples, pear, cherry, plum and peach. The garden, beginning with pie plant and running through the series of staple vegetables; then you can branch off into the fields, in which you must consult soil, distance to market, prices, and facilities of culture. In farming forty acres, use brains, manure and muscle, and you will win. To run over a thousand acres needs nothing but brass to run in debt, with a good supply of swagger. How many of the great farmers would like to swap chances with you, Mr. Clod Hopper, is not for us to say, but we know of several if not more.

To prevent moths from eating clothes, place camphor among them.

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## D<sup>R</sup>. JOHN A. KENNICOTT.

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may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin now, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

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- No. 3—Cut 12 inches, right and left hand, single and double shin with wrought and cast standard.
- No. 4—Cut 14 inches, right and left hand, single and double shin, wrought and cast standard.
- No. 5—Cut 16 inches, right and left hand, single and double shin wrought and cast standard.
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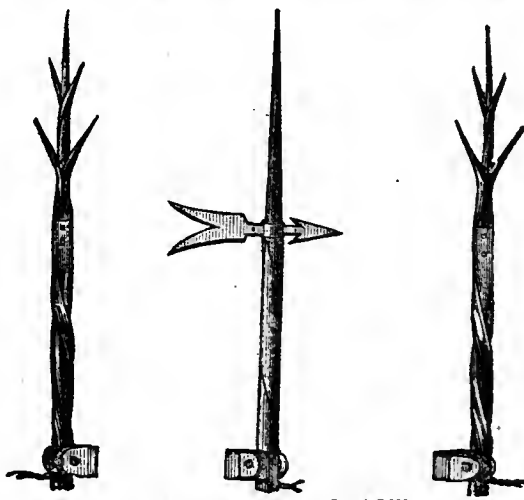
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, MAY 1862.

NO. 5.

## May.

April, with her weeping skies, threatens to encroach upon the domains of May. Rain, rain, is the order of the day—"all quit on the farm;" the fields present a sea of mud, too deep to drive the plow afield and the farmer must wait patiently for a change of weather. The season has been bad for tree planting and for every species of outdoor work. The breadth of spring planting must, of necessity, be much less than usual. At the same time we have the consolation of knowing that the winter wheat is promising, it was but little winter killed and is now making a good growth. As the spring crops will be limited, a large breadth will be left for summer fallow for winter wheat, and with a good crop of this grain, as now promised, a very large amount will be sown this season. We are not likely to hear about ten-cent corn very soon again, what with a small crop and the thousands of bushels now rotting in the open cribs by the long continued wet weather, the price must soon advance; already we see symptoms of a desire to speculate in this staple. We hope farmers who have their corn in open cribs, will lose no time in putting on good covers, otherwise they will lose a large part of its value; better give half the corn for boards to save the other half.

We cannot too strongly urge the planting of corn to follow the plow; do not wait to check-row, but plant your rows one way, in hills if you please, or in drills if you can. Use the two-horse cultivator, of which there are several good ones to cultivate, and do not forget that if you want a good stand and

ease of culture, plant shallow and use a field roller after planting; this will crush the clods that are sure to follow this long season of mud. Potatoes should also be planted shallow and the ground rolled.

Those who intend to plant cotton should select good clean dry land and use plenty of seed.

Strawberries should be set out, if not already attended to. Seeds of annual flowering plants should be sown. Sow these in seed beds, sheltered with a slight covering of straw, and transplant on a wet day to the borders where they are to stand. Early potatoes for seed, should not be planted until the last of this month. The main crop of potatoes should be planted between the tenth and last of the month. Sow cabbage seed for winter use. May is always a busy month, plowing, planting and cultivating; but this year, on account of the wet weather through April, the duties are largely increased, and the farmer must be active, or his crops will be of little account.

At this writing, April 21st, the apricots are in bloom and the peach blossoms are beginning to redden at the ends. Some of the apple trees have leaves half an inch in diameter, while others are bursting their buds. The past week has been the busiest of the season for orchard planting, but the horrible condition of the roads have prevented as extensive operations as was intended. Next month we shall have something to say of our own planting. Our better half served up rhubarb pies the 18th, grown in the open ground without artificial aid. They were from the Lineous, which is a few days

ahead of Early Tobolsk and Myatts Victoria; we now use Lineous for early instead of the Tobolsk, while for the main crop we have an abiding faith in the Myatts Victoria. Many people have purchased Victoria supposing they have the genuine, but seedlings of the Myatts Victoria have, in numberless cases been sold, when the purchasers supposed they were getting the genuine. The demand for grape vines have been large, and we shall hope to see grapes in abundance at no distant day. In fact all the small fruits are receiving universal attention this spring. No man can long be considered a good farmer without a good vegetable garden, plenty of small fruits and a good orchard.

### The Value of Trees on Climate.

Spring is now here! Slowly she came up from the South, later by two weeks than her wont. She could not pass the blockade at Island No. 10, and was delayed in making a flanking detour to gain her line of march; but that she is here, we have the most indubitable evidence, for the bulbous venal flora is springing up along the garden borders, the winter wheat is sending up its tillering shoots, and the farmer is busy harrowing in the spring wheat. Barley and oats, are being sown, grass and clover seed are in requisition to replace the failing prairie grass that a few years since waved its wild luxuriance over the long stretches of prairie. The native grass like the native Indian, cannot withstand the march of the white man's flocks, or the music of the reaper. Timothy and clover must follow the footsteps of the one, and take the place of the pasturage of the other.

The changes that have come over the prairies in the past twenty-five years, is wonderful, and yet a large part of the prairie homes lack many elements of the useful and the beautiful. A home standing out upon the wide sweeps of prairie is a pleasant

sight, when it is bordered in by the wild prairie grass, and the emigrant has just unboxed his goods; but when broad acres have been subdued by the plow, when long lines of fences mark the boundaries of the ample fields, when the white school house stands at the parting roads, when the onward sweep of civilization has laid down the iron rail that brings it within the charmed circle of the telegraph, of social privileges and of markets; such a home loses its charms, the waving grass is gone, the plow has made a grave for the tall prairie flowers that waved their wild luxuriance around its portals, and unless some new beauties shall come forth to take their place, the home will no longer have attractions for its inmates, and will cease to please the beholder. Trees that wave their summer foilage in the sunlight—trees that shut out the noonday sun, when the farmer comes in from his harvest toil and would recruit his wearied muscles, so as to keep time to the music of the reaper as it lays low the serried ranks of bristling spikelets of the ripened grain. Trees that shut out the rude blast that would visit the homestead too roughly—trees that protect the tender flowers that the wife or daughter plant around their home to entice the genius of love to linger and shed his blessing over all—trees along the highway to shelter the weary traveler and to beautify the homestead—trees to belt in the farm with a band of living verdure to protect the crops from sudden changes and damage from high winds—trees around the orchard to shield it from frost and prevent the blowing off of the half grown fruit—trees around the barnyard to ward off the driving sleet and chilly wintry winds from the patient herd—trees amid whose leafy boughs the birds build their nest, and from whence they pour forth their song to cheer the sons of toil, and make constant forays on the insect tribes that would otherwise destroy our crops—trees for fruit, both for winter and summer—trees to please the eyes of old and young, the farmer who ought to have an eye for the beautiful in nature, and

the mechanic who longs for the time when he will own a tree.

#### WHY TREES ARE NEEDED.

When the Almighty raised the prairie for the last time from out the deep blue sea and permitted the sun to kiss dry the undulating surface that the up springing grass might carpet it for the buffalo and elk, He cut great *dead furrows* with their sweeping curves for the rivers, and planted their borders with trees, for the landscape without them would be a wild dreary waste, and the sun would too soon lick up the moisture that the clouds might occasionally shower down, and the prairies would have become a barren waste; but He protected the rivers from too sudden evaporation by the sinious belts of river forest, and where the lazy pond basked in the sun or a swamp intervened, there grew up on their eastern margins the groves for shelter from the morning sun. The surface where no tree sent up its sheltering arms, was covered with the thick matted grass to shut out the sun from drinking up the moisture from the porous soil. The river belts, the wood-crowned prairie swells and swamp protecting groves, drew down the lightning from the clouds laden with rain, that had been gathered from the gulf, and now wending their way to the northern lakes; but with the discharge of electricity came the needed shower, and the clouds went up to the lake region nearly drained of their moisture. Without trees we would have no summer showers, for no lightning would disturb the misty wreaths, gather them into rain drops too heavy for the gauzy fabric of the wind driven cloud, to longer hold within their grasp.

#### MAN HAS CHANGED THE HYGROMETIC CONDITION OF THE PRAIRIE.

When Lasalle and Ibberville, under the direction of Louis XIV of France, took possession of the prairie country lying between the great lakes and the lower Mississippi, they found the rivers filled to their

margins, the ponds and sloughs bridged with water lillies, while the marshes sheltered their oozy beds with weeds and rank grass. The lazy waters made slow progress through the fallen timber of the woodland slough, or the tangled grass and rushes of the prairie bottoms. The heavy rains sunk into the earth, and was protected from the noon-day sun by rank grass and the broad leaves of the summer flora, and by thus maintaining a constant moisture, the vegetation became rank, the night air was saturated with miasmatic dew that gave still greater vigor to plant life, but to persons exposed to its influence, pestilent with ague and other bilious disease. The crops of the first settlers were perfect marvels for quantity and quality, but when we take into consideration that they were grown in an atmosphere saturated with carbonic acid and amonia, supplied from the decomposition of the rank vegetation and slow evaporation of the surface, we should cease to wonder. The climate was genial, soft and balmy, for the valley of the west was filled with a sea of warm damp atmosphere, hemmed in by the immense woodlands to the east and south, and receiving constant accessions from the west and north. Thus the great prairie slopes presented to the adventurist a soil unsurpassed in fertility, and a climate mild as though encompassed by wide seas. The "trade winds" that for six months of the year gave their ceaseless volume of heated air through the gulf, and over the great forests of the south into this *Arcadia*, held the cold winds of the north in check, and so modified their effects that sudden changes of climate were almost unknown. Belts of timber and extended groves were then of less consequence, for the air was always damp. The trade winds had not as yet been robbed of their moisture by the great belt of forest that flanked the lower Mississippi, the rivers of the north with their constant flow, gave off their watery particles as they wended their slow march to the south, and the wall

of forest to the east, held this great sea of moist atmosphere within its own bounds. Could these prairies have been cultivated under that state of things, it might well have been called the garden of the world, for its fertility could not easily be exhausted, but though so invaluable to the production of vegetable structures, it had within itself the elements that was sure to sap the foundation of animal life, and render it dangerous as a residence for man. The history of the early settlement of the country has given ample proof of this great fact.

But what has all this to do with the planting of trees, enquires the reader? Much—very much, as will be seen when we come to consider,

#### THE EFFECT OF CULTURE OF THE SOIL UPON THE CLIMATE.

The clearing up of the great belts of forest to the east and south, has had much to do in changing our climate. In the first place, the cutting down of the forest to the east, by inducing a dryer atmosphere, opens a communication to our air currents and thus gives them an outlet to the east, while from the south, the now open country with its rapid evaporation, robs the trade winds of a large share of their moisture, and the south-west wind comes to us dry and cool, instead of damp and warm. The culture of the soil opens it to the influence of the sun and the moisture is rapidly evaporated—the prairie bottoms no longer contain rank grass, for the large number of cattle pasturing on them, hold it in check, admitting the sun almost to the naked soil, and these become dry lands. The sloughs and small streams have been cleared of the flood wood which had dammed up the water for the sun to evaporate, and now during heavy rains, these small streams become like mountain torrents rapidly discharge the water that finds free access to them from the cultivated fields, making the large rivers overflow their banks and render useless fences, farm houses, stock and crops of all kinds along their

banks. The spring and autumn rains are thus hurried out of the country, and find their way to the gulf. The surface of the land being exposed to the heat of the sun, its moisture is exhausted and goes east with the great current of air that so constantly sets in from the south, and now instead of having the damp warm climate as in the normal condition of the country with its soft oozy soil, covered with rank vegetation and redolent with ague and fever, we have the dry, cool changing climate of the continent, with its solid soil, its invigorating air, and in most respects better adapted to the abode of man. What old settler in Chicago who does not recollect the pontine marsh that belted the city to the west, with its base at Mud Lake, and its head among the timber skirts that fringed the North Branch. For long years this tract was given up to the batrachions, and a few families who built their huts on the dryer portion, cut the course slough grass for city use, and stole wood from the timber along the lake shore, and thus eked out a sort of amphibious life. Anon farther and farther out upon its broad expanse of malaria, that the west wind brought to the city, grazed the herds of the drover or the cows of the citizens—a few ditches for the stagnant water, and lo! Mud Lake and the pontine marsh are gone; broad meadows spread over the lake, farms and gardens occupy the marsh, the huts of the amphibia have given place to fine mansions, and the city itself has extended its solid treets for miles over the rush ponds, which drained of their stagnant water and exposed to the sun, make pleasant homes; and no longer does the west wind bring to the city the malaria once so much dreaded, upon the evaporation of the water of the marsh that stretched west to the Des Plains, and where Berry's Point sent out its headland of solid soil, to greet the mud-stained emigrant and his weary team as he plodded on to the Rock River country.

We need not adduce further proof of the



effects of culture upon a soil like that of the prairie, nor should our farmers and gardeners be surprised that its virgin surface no longer produce the immense crops of cereals or of other products, as before culture wrought this wonderful change. They should remember that this change has given us a dryer soil to cultivate, better roads to travel over, and a more arid and invigorating atmosphere, made the marshes habitable, and cleared the streams of their accumulations of rotten wood and slime.

On the other hand, we have sudden variations of heat and cold, of flood or drouth, with rivers less valuable for navigation, and their deltas nearly ruined for agricultural purposes.

These facts are patent to the west, yet few have examined the causes that have wrought this material change of climate and baffled the experience of the early settlers. That this change of climate has brought us a new condition of things, there can be no doubt; implying new implements and new modes of culture. Whether the change is advantageous or not to the husbandman, is no part of our present object to discuss; that it has its advantages and disadvantages, is easy to be seen, the most prominent of which on the one hand is a diminished product, and on the other, better health, but the facts are here, and to them we must attend. To this end, we return to

#### THE EFFECTS OF TREES ON CLIMATE.

The sun robs the soil of its moisture and the wind of its heat, two elements that have an important bearing on the resulting crops. Now it is well known that forest belts retard the rapid sweeps of the wind and hold it in check. If you close the doors and windows on the lee side of a house, and open those to the windward, the effect is but slight; now open the opposite door and you have a strong current that will at once reduce the temperature of the room; close the door and the equilibrium is restored. Just such is the effects on a large scale, when broad

belts of woodland interpose and cross the winds path, for it should be borne in mind that wind, like water, has weight, and is checked in its progress by rough and uneven surfaces; it cannot pass over high mountains, and its onward sweep is comparatively slow over extended forests, while on the smooth surface of the prairie we see the reverse. A fact so plain should have long since attracted the attention of the farmers, and suggested a remedy. During the spring months we have two currents of air that generally combine, and as one or the other becomes the controlling one, we have a sudden shifting from south-west to north-west. The cold current coming from the north, following the base of the Rocky Mountains until it meets the trade winds of the south, both are then drifted in an easterly direction, but in a few days after the first of April, the steady flow of the *trades* are too much for their northern antagonist, and we have an almost uninterrupted flow of south-west wind, yet always containing, mixed with it the cold current that has traveled along the base of the mountains, charged with the dampness of melting snows, and the keen frosty air of the polar belts. Thus the south west wind, until the summer has traveled far north, is always more or less cold and damp, and when it has an uninterrupted sweep over the newly sown grain, robbing the soil of its heat, cannot otherwise than have a tendency to check its growth. To check this effect, we must plant our wall of timber across its pathway, which will be on the west side of our fields, with wings to the east from either point; this will arrest the progress of the wind from all westerly points; but we should be the most particular to guard the south-west point, as from that we have the most constant currents. A single row of trees have a wonderful effect in checking the force of the wind, and a belt two rods in width will entirely break its force and compel it to pass over. In all sheltered nooks we observe with what vigor the grass and



grain comes forward, in all cases ripening several days in advance of that exposed to the wind. Nor does the effects stop with early maturity, the quantity and quality are alike improved. In the fruit crop, this effect is always the more decidedly apparent, and so much so has this become apparent to cultivators of fruit, that it is generally conceded that shelter must be had from the winds by timber belts, close planting of low headed trees or high board fences; but this latter has no beauty, is expensive, and should never take the place of timber belts, so full of life and beauty.

#### TREES ABOUT THE GARDEN AND HOUSE.

First they are beautiful, whether full robed for summer, bending their bare arms to the wintry blast, or opening their buds under the weeping skies of April—they are always beautiful and objects of delight about the homestead. We pity the child cradled where no trees adorn the dwelling, the maiden whose kaleidoscope is not relieved by these robed monuments of Gods kindly care, for her heart will be as desolate as the surroundings of her home. When man builds his home on the prairie and turns up its kindly soil, the insect tribes follow in his footsteps and are ready to prey upon his labors, while in turn the birds prey upon the insects, in accordance with the great law of nature, permitting one race to supply food for another. Thus the hand of man supplies by his labor food for millions of insects, and which continue to increase with wonderful rapidity, and were it not for his friends, the birds, and some others among the cannibal insects, his fields would soon be divested of every green thing, and himself turned out a pauper from his own home. But few birds will visit the garden and house grounds, unless there are trees and shrubs in which to build their nests. It is therefore important in a business way, to plant trees for the home of these our feathered friends, that they may be at hand to pick up the cut worm when he makes his attack upon

our plants, to look after the wire worm when the furrows are turned for the corn, to arrest the borer when in the winged state she is busy laying her eggs in the bark of the delicate fruit tree, to guard with a watchful eye the insect tribe that they do no harm, or at least hold them in respectful check, that they take no more than their share of the labors of man.

#### HEALTHFULNESS OF TREES.

In the first breaking up of the prairie, the decomposition of the matted roots of the rank grass, often induces bilious diseases, more especially if the new plowed land lies to the west of the dwelling so that the south-west wind wafts the miasmatic exhalations to its inmates. A narrow belt of trees robed in their summer foliage, will rob the air of its deleterious gasses which the leaves decompose, and the family is thus protected from its otherwise bad effects. In like manner a belt of trees interposing between the homestead and a malarious marsh or river bottom, will rob the air of its deadly vapors. Would that our farmers might consider these valuable traits of the leafy treasures of the trees.

It is said that an ounce of preventive is worth a pound of cure, and in the case of trees is eminently true. The trees by breaking the force of the chill winds of spring, forwards and increases both garden and field crops. They induce the birds to look after the insects which otherwise would do as much damage. By sheltering the homestead, it protects the family from the bad effects of poisonous gasses that rapid changes of heat and moisture distil into the air, but which the leaves always drink in when they come in contact with their delicate tissues. Fruit trees are always valuable as well as profitable, and the cry that their planting has become so common that in a short time they will become unsaleable, is but the old cry of the boy and wolf, with the wolf left out, for the wolf never comes. Forty years ago we heard this same predic-

tion, and for several years were a firm believer in the doctrine, but time has dispelled the illusion. Forty years since seedling apples sold for six to ten cents a bushel, and grafts fifteen to twenty-five; now they bring from fifty cents to a dollar, and often more; therefore we can continue to plant fruit trees with the prospect of profit as well as shade and beauty. By a liberal planting of trees throughout the country, we shall have more summer showers and less of drenching rains, thus making the moisture more equable than at present, and giving a greater certainty of good average crops. If you have no trees at hand to plant, use cuttings of willow, of cottonwood, and of the lombardy poplar. Those are rapid growing trees and will soon make an abundance of firewood, as well as of immense value for shelter, not only to crops, but to the farmer and his stock. Therefore, we say use the ounce of preventative, and if you plant ten acres less of corn the present spring, do not neglect the trees both for fruit and shelter.

**SALT, COAL AND GYPSUM IN MICHIGAN.**—The Scientific American in noticing the results of the State Geological survey of Michigan, makes the following statements as to its salt springs and beds of coal and gypsum:

The commercial importance of these salines may be best understood when we say that between Lake Michigan and Salt Lake, in Utah, no brine springs have been discovered. The whole north-western country must then be tributary to this State for its supply of common salt. Brine springs have been discovered west of Michigan, but they lie in the British possessions.

The coal formation, too, has received the attention of the survey. The number of the seams of coal, their depth beneath the surface, as well as the thickness of the entire surface, have been determined. At present the north of Michigan is covered with an immense growth of forest vegetation. But a few years will pass, and this vast amount of forest will give way before the ax of the woodman. Then will the hidden wealth of coal be sought for, to work her brine springs, to feed her locomotives, furnaces and forges, as well as to give heat to the inhabitants of the country.

To the agricultural portion of the State the value of the beds of gypsum cannot be overrated. These have received special attention in the report. Michigan is a land of sandy soil—one that feels the effects of sulphate of lime (plaster of the farmer), and abundantly repays the out-

lay of its use. Michigan is the only State of the Union which possesses a supply of gypsum, salt and coal.

We notice some points of the science of geology as settled by the investigations of Prof. Winchell.

First, that the salt and gypsum rocks belong to the carboniferous system of geologists, and in this respect differ from that of any of her sister States. In New York the salines and plaster beds belong to the silurian system. In Ohio, Pennsylvania, Western Virginia, Kentucky and Illinois, the salines are included in the carboniferous system. In Southwestern Virginia the salines are with the devonian, while in Kansas and the Indian country, Utah and the Great Desert they belong to systems much more recent than the carboniferous, viz., the permian, triassic and cretaceous, if not also to the tertiary.

**COTTON SEED FOR ILLINOIS.**—There seems to be a disposition in Illinois to make the experiment of raising cotton this season. That cotton can be produced upon the fertile lands of that State, as far north as latitude 40°, or higher, seems to be established beyond question. The production in the cotton States probably will in any extent be very far short of the ordinary crop. Hence, with a certainty of a short supply, prices are shure to be remunerative in Illinois, for one or two seasons, if not permanently so. The experiment will undoubtedly pay, and it will be interesting to try the culture of cotton upon free soil and by free labor.

We are requested to publish the following notice for the information of those who desire to procure seed of the quality suitable for the latitude of Illinois.

PADUCAH, KY., MARCH 28, 1862.

*John P. Reynolds, Cor. Sec. State Agricultural Society, Springfield, Ill.:*

I have purchased a large quantity—say three thousand bushels—of cotton seed in Tennessee, adapted to the climate and soil of southern Illinois. I will forward under the directions of the interior department, and advise you in time.

D. C. DONNOHUE, Gov't. Agent.

—(*Missouri Democrat.*)

—A large amount of the seed is now at Cairo and on the way, and all who wish to try cotton growing should apply to the station agents of the Illinois Central Railroad for seed, the cost of which will be but a trifle more than the cost of sacking and freight.

Ed.

—Almost every young lady is public spirited enough to be willing to have her father's house used as a court house.

—Short-nosed men shouldn't complain if everybody snubs them, since nature herself set the example.

### Raising Poultry as a Business.

Can this be done, and done profitably, inside of city limits? This is a question of a female friend, "in want of something to do to aid in the support of her family." She says:

"Would it be proper for a woman to establish a henery anywhere on the face of the earth, and would it be profitable in the small city where I live? My friends (?) assure me that it would be exceedingly improper and indelicate for me or any other woman to enter into anything of the kind; they say, "all the town will laugh at you." But if this is the only objection I can manage that."

Unfortunately, that is not the only objection. The grand objection is that it don't pay, as a general thing. That this is so, is proved more to our satisfaction than in any other way, by the fact that almost every one who has started the business has given it up after years of trial. The most successful poultry manufacturers that we know of in the United States, are the Messrs. Beatty of Aurora, N. Y., but they are not strictly manufacturers, but finishers. They buy the manufactured article and finish it off ready for market, by careful feeding and neat cleaning and packing. This they do profitably to an immense extent. But we do not know of a great poultry manufactory anywhere in this country, and do not believe one can be established within the limits of a town that will be profitable, because the birds are not healthy in a state of confinement.

Poultry raising and the production of silk, belong to the families of farmers, by right, and can never be taken from them. Neither can be manufactured on a large scale; both belong to the country. Poultry raising, as practiced by the females of some farmers' families, is a delightful rural employment, and is sometimes profitable. It is much more often a bill of expense, so far as it relates to direct profit. But it is very profitable to keep poultry on a farm, on account of the aid the birds are in destroying insects. In some cases, keeping poultry is profitable, mainly in the value of the manure.

Our correspondent inquires if there is not some particular breed of fowls that will produce a sort of "golden plumage" profit?

That breed sickened in the light of "the hen fever," and is now nearly extinct. The hens that "lay two eggs a day" always cost as much as the eggs come to, and a little more. If our fair friend still desires to establish a city poultry market, we advise her to confide her efforts entirely to ducks, and never let them see water enough to swim in. Set the water for them to drink where the young can only get their heads in. Water is for country ducks; city ducks can do without it.

In conclusion, we doubt the chance of our fair friend to make a henery profitable, though eminently proper.—*N. Y. Tribune.*

(From the North Western Farmer.)

### Reversing Fence Posts—Striped Bugs.

The time is fast approaching when farmers will be engaged in building and rebuilding fences. As the plank and wire fence is taking the place of the old zig zag rail protector, I ask a space in your Monthly Visitor, to give my experience in setting posts. In the year 1845 I made some new paling fence, setting the posts a portion of them top end down, and others butt end down.

After twelve years the fence was rebuilt and all those posts set top end down, were sound and took their place in the new fence, for another twelve and twenty years; while those butt end down were entirely rotted off.

Farmers, try the top end down if not quite so large.

Now for the striped bug, that inveterate destroyer of cucumbers, melons, and squashes in their early growth. Year after year I have combatted them with thumb and finger, sulphur, chimney soot, boxes, etc. Last spring, I had a few fine hills of early frame cucumbers, just coming into fourth leaf, and as necessity has created the motto, "eternal vigilance or no safety," I went out as usual to examine my patch, and lo! and behold! not less than a thousand to a hill were working away and the air full of new recruits. I felt all was over with that planting. But my wife came to the rescue; saying she would give them a dose such as her old grandmother used to give. What could it be! A little bunch of cotton saturated with spirits or oil of turpentine, placed in each hill; and such a scattering I never did see.

In three minutes not a bug was to be seen, evidently not liking to deal in *spirits*. They next attacked the Autumn marrow squash you sent seeds of. I applied it again and from five seeds, had forty fine squashes, a portion of which I sold two weeks since at twenty cents each.


J. A. P.

*Bunker Hill, Ills., March 22d, 1862.*

**FULL GRANARIES IN THE WEST.**—There never was a time in the history of the grain trade, remarks the N. Y. Tribune, when such large amounts of produce were stored, waiting the opening of navigation to move eastward. There was in store at Chicago, March 23th, 1862, 3,050,000 bushels wheat, Toledo, March 15th, 293,561 do; Buffalo, March 20th, 768,208 do; Milwaukee, March 21st, 3,300,000 do; Detroit, March 21st, 402,300,000 do.

Of corn in store, the following is the estimate: Chicago, 2,356,784, Toledo, 524,175; Buffalo, 233,917; Detroit, 104,000.

The Illinois Central Railroad has in store over 1,000,000 bushels. In the city of New York there is already stored 1,250,000 bushels of corn. Millions of wheat and corn are stored at different points on the lakes, waiting the opening of navigation, which would swell the above aggregate to an almost fabulous amount. Present indications are that the grain movement of 1862 will far exceed that of any previous year.

 The city of New York consumes ten thousand dollars a day in cigars, and only eight thousand and five hundred in bread.

## Cultivating Plants when the Dew is On.

At least fifteen years ago, I noticed a plot of cabbages, of which the large firm heads I could not account for from anything apparent in the soil. On asking the owner how he made from such a soil so fine and uniform a crop, I found his only secret was that "he hoed them while the dew was on." He thought that in this way he watered them, but of course the good resulted more from the ammonia than the moisture of the dew.

I adopted the practice the following year, and with the result was so well satisfied, that I have since continued and recommended it to others. In my "Gardening for the South," published two years since, you will find (page 163) "they (the cabbage tribe,) especially like to have the soil about them, thoroughly worked while the dew is on them. There will be a very great difference in the growth of two plots of cabbages, treated in other respects alike, one of which shall be hoed at sunrise and the other at midday; the growth of the former will surprisingly exceed that of the latter."

A story in point sometime since went the rounds of the agricultural press, of which the substance follows: A small plot of ground was divided equally between the hired lad of a farmer and his son, the proceeds of its culture to be their own. They planted it with corn, and a bet was made by them as to which should make the best crop. At harvest the son came out some quarts behind. He could not understand the reason, as he had hoed his twice a week until laid by, while he had not seen the hired lad cultivate his plot at all, and yet he had gained the wager. It turned out the winner's crop had been hoed quite as frequently, but before his rival was up in the morning. Providence, it seems, follows the hoe of the early riser with a special and increased reward.

But there are exceptions. Cultivating while the dew is on, manifestly benefits such gross feeders as cabbage and corn, but there are plants very impatient of being disturbed while wet. The common garden snap and running beans are examples; and if worked while wet, even with dew, the pores of the leaves seem to become stopped, and the whole plant is apt to rust and become greatly injured. Whether the Lima beans and other legumes are as impatient of being hoed in the dew, I have not ascertained. Experiments should, however, be tried the coming season on all hoed crops.—*Cor. Country Gent.*

## Quantity of Milk for a Pound of Butter.

Much difference of opinion is entertained in relation to the quantity of milk required to make a pound of butter. It is true that there is a very great difference in the quality of milk from different cows. The feed, also, has much influence upon the richness of the milk. The milk of the Alderney cow will give much more butter from a given quantity of milk, than any other breed with which we are familiar—but it is very desirable to ascertain, as far as practicable, what is the

fair average of dairies, composed of the dairy cows of this country, and treated as our best dairy cows are by good dairymen.

We requested a dairyman in this State, John S. Holbert, of Chemung, to make the experiment and furnish us with the result. He has done so and his statement will be found annexed. From this it will be seen that the fair average of dairy, taking the season through, is fourteen quarts of milk for a pound of butter. We have made extensive inquiries since this statement was furnished, and the general impression of dairymen, in our own and adjoining States, corresponds with that of Mr. Holbert.

It will be seen in the report which we give of Mr. T. Horsfall, of England, on the management of dairy cattle, that the same average is found in Mecklenburg, Prussia, Holland and Great Britain.

It is very important that our dairymen should make careful trial of different varieties of feed, testing the qualities of each, and thus ascertain what is most beneficial, in addition to the ordinary pastures of the farm. Indian corn for soiling has been very successfully used in this State for dairy cattle—and in the severe drouth of 1854, those of our dairymen who had this resource, were enabled to make their full complement of butter, while others suffered a very great reduction in their annual produce. The Chinese sugar cane is recommended as favorable for this purpose, and its extensive culture during the approaching season, will doubtless test its value. The Stowell Evergreen corn has proved the most valuable variety for soiling that we have ever known in this State. We hope that our dairymen will give attention to the subject, and communicate to the society the results of the trials which may be made, with any variety of corn for soiling.

### JOSHUA S. HOLBERT'S STATEMENT.

B. P. Johnson, Esq: In order to ascertain the quantity of milk necessary to make a pound of butter, I have measured several churnings of milk, and then weighed the butter, and it takes now fifteen quarts of milk to make one pound of butter. I think, to take the whole time of milking for the year, it will take fourteen quarts. My father, John Holbert, thinks it will take between thirteen and fourteen. Last fall, while feeding pumpkins, about nine quarts made a pound.

JOSEPH. S. HOLBERT.

(*Trans. N. Y. State Ag. Society.*)

~~Be~~ the eulogies of critics without taste or judgment are the natural rewards of authors without feeling or genius.

~~Be~~ If a bear were to go into a linen draper's shop, what would he want? He would want muzzlin'.

~~Be~~ Little drops of rain brighten the meadows and little acts of kindness brighten the world.



## Vinegar for Everybody.

I notice in a late number of "Field Notes," that a correspondent says there is not a barrel of pure cider vinegar in the city of Columbus, but an article composed of whisky and molasses, or something worse; and then he appeals to the people to plant more orchards, and make their surplus apples into vinegar. I think we would have to wait a long while for vinegar in that way. I think I can propose a way so that everybody can have pure, wholesome vinegar of their own make. I will give you my own experience:

A few years ago I heard people talk about the vinegar plant; I obtained one five years ago, from a lady, who gave full directions how to manage it; she said it must be changed every month, on Friday after the new moon; that there would then be a new plant formed, which might be separated from the old one; that each plant must be used separate, and each to make one gallon of vinegar every month. I also heard from others many things about the vinegar plant which I then concluded and am now well satisfied were mere whims; however, I tried my plant, and made my vinegar from it through the summer and fall, but in the winter the jar it was in got broken, and I did not take any care to save the plant. I examined it then, and had done so before, and became satisfied that it was no more or less than the mother from cider vinegar.

After that I got some vinegar from a grocer, which he said he knew to be pure cider vinegar, and after getting three gallons in a jug at three different times, I found about a table-spoonful of mother in the jug; I put it to about a quart of sweetened water, and put it in a glass jar so that I might witness the operation. It was some time before it began to make any change, but at length it began to enlarge, and in about two months it formed a thick, nice plant or mother on the top, and the vinegar was very sharp. I then put it into a gallon jar, and it kept increasing in size; I then put it into a two gallon jar, and at last I procured a keg, which holds twelve or fourteen gallons, (this was about a year after I commenced;) since it has been in the keg it has done well, and I have changed it but twice in the past year.

Now if anybody wants good clean, wholesome vinegar of their own, I would advise them to do as I have done: first, get a quantity of mother, and then get a good strong cask that will hold from five to twenty gallons or more, take out one head, (if it has two in it,) set it on end, put in a faucet near the bottom, use clean rain water, make it milk warm, and sweeten it by using one pint of molasses to each gallon of water; put it in the cask, put in the mother, cover it sufficiently to keep out the flies and dirt in the summer.

If you set it where it will get the sun and air, it will make vinegar much quicker. In the winter it is necessary to keep it in a warm cellar, or some place where it will not freeze. After it becomes vinegar, it is not strictly necessary to keep it in a warm place, but while it is making, it will sour much faster if it is kept where it is warm. After it becomes vinegar, you can draw and use as you need, and when it gets low, draw all out

and put it in something for present use; empty out the mother and the sediment which will be in the bottom, fill up your cask again and put in the mother.

You should not use too much water at first, until you get plenty of mother, as it will take longer to make vinegar. If you use more than a pint of molasses to a gallon of water, it will make stronger vinegar, but it will take longer to make. If you use less molasses, it will make quicker but will not be so sharp. This I believe to be the best, cheapest and most wholesome vinegar that can be used; much better than that which is made from whisky, oil of vitrol, or any poisonous ingredient.

AN OLD MAN.

*Peru, Ind.*

REMARKS.—We can corroborate all our correspondent says, except that we do not believe there is anything else so good as pure cider or wine for vinegar. Where this cannot be had, a vinegar from sweetened rain water is an admirable substitute. But the vinegar keg should be kept supplied with all the fruits used from time to time in the family, such as dried apples, berry jam, apple skins, etc., soaked in clean waters, scalded, and rubbed through a sieve or colander, then strained through a cloth, and the liquor thus obtained put in the tub to keep up the supply. We tried the Vinegar Plant, so called, several years ago, and found it just as our correspondent says.—ED. FIELD NOTES.

## Food for Fowls:

Fowls are of all birds, the most easy to feed. Even alimentary substances agree with them, even when it is buried in manure; nothing is lost to them; they are seen the whole day long, incessantly picking up a living. In well-fed fowls, the difference will be seen, not only in the size and flesh of the fowls, but in the weight and goodness of the eggs, two of which go farther, in domestic uses, than three from hens poorly fed, or half starved. It is customary to throw to the fowls in a poultry-yard, once or twice a day, a quantity of grain, generally corn, and somewhat less than they would consume, if they had an abundance. Fowls, however, are more easily satisfied than might be supposed from the greedy voracity which they exhibit when fed from the hand. It is well known, that as a general rule, large animals consume more than small ones. There is as much difference in the quantity of food consumed by individual fowls as there is in animals. It has been found, by careful experiments, that the sorts of food most easily digested by fowls, are those of which they eat the greatest quantity; they evidently become soonest tired of, and are least partial to rye. It has also been found that there is considerable economy in feeding wheat, corn, and barley, well boiled, as the grain is thus increased in bulk at least one-fourth, and the same bulk seems to satisfy them; but there is no saving in boiling oats, buckwheat or rye.—*American Poulterer's Companion.*



(From Field Notes.)

## Culture of the Cotton Plant.

### SOIL.

Select if possible a dark colored, sandy, or sandy loam soil, with a southern exposure if possible. It should be well pulverized, therefore it should be plowed rather deep twice at least and then harrowed. It should then be plowed in ridges, and the cotton planted on the ridge, so that the water of the spring and summer rains will not stand about the roots of the plant, but will flow away as soon as possible.

A drought will check the growth of the plant and the bolls will not develop, but will fall off; a wet season is equally pernicious.

### TIME AND MANNER OF PLANTING.

In the southern States, cotton is planted from the first of March until the first of June, according to circumstances, as corn is planted here in Ohio from the first of May until the first of July. The object in planting in March appears to be to obtain time to attend to other farm work, as well as to realize the entire amount of cotton, should the season prove favorable. But even in Georgia and Alabama, the March planting is frequently cut off by frost. On account of the comparative shortness of our seasons, it should be planted as early as possible, so as to avoid the spring and early fall frosts. It does not bear transplanting as well as tobacco does.

After the ground has been prepared by plowing and harrowing, it is then ridged or furrowed out; the ridges being from four to five feet apart one way, and about two feet apart the other. Some planters ridge one way only, and then plant the seed twelve or eighteen inches apart; others ridge both ways and plant the seeds in rows, say two feet by five. There are generally four or five seeds planted in a hill, and these are subsequently thinned out, so as to leave two or at most three stalks in a hill.

### SOAKING THE SEED.

Mr. M. W. Phillips, one of the most successful cotton growers in Mississippi, recommends that the seed be thoroughly soaked with salt and water, or in a brine made by steeping stable manure in salt and water for ten days before using, or until fermentation has ensued. The seeds are then dried off with ashes or lime or plaster—the latter is preferred because it makes the seeds perfectly white and they can be more carefully planted. When the seeds are planted they are lightly covered, that is to say, covered from half an inch deep with the soil. Cotton seeds are about the size of white beans, and the quantity of seed for any given plot of ground is much the same as that required for field corn.

### AFTER CULTURE.

The after culture of cotton is much like that of corn; it requires to be kept perfectly free from weeds and grass.

The crop of cotton can be gathered at several times; first from the lower bolls,—these ripen first; in many instances the lower bolls are gathered before the upper or top ones are in bloom. Some days, and in many instances weeks even, after the first bolls are gathered, the middle ones will be ready to be harvested, and if the season be long and favorable, quite late in the fall the upper or topmost bolls may be gathered; but it is very seldom indeed, even in Georgia and Alabama, that the topmost bolls are gathered; they are generally caught by the frost before ripening.

JOHN. H. KLIPPART.

THE WEDGE.—*Editor Co. Gent.*:—I notice in your issue of Jan. 23d, page 61, a very sensible article upon "The Ax, the Beele, and the Wedge," by Mr. A. Fish, which I consider a "stick in time." His descriptions of the ax and beetle are good, and so is that of the wedge in a general view or sense. But I have found the wedge decidedly a "peculiar institution," i. e., I have been an occasional "rail-splitter" *de facto*, for several years, during all of which time I have never seen but one wedge of just the right size, shape and proportion, which I now fortunately have before me. I will attempt to describe it, which is as follows: Length, 9 inches; width, two inches and one and one-half inches thick at the top or head end—weight, four pounds six ounces—made perfectly straight on each side from head to point, with a slight groove, say half an inch wide and one-eighth deep, running down each side from one inch of the head—said groove becoming narrower and shoaler until within one and a half inches of the point, where it comes out and leaves a flat surface to the point. This wedge is decidedly superior to any and all others I have ever used. It will "stick," and when it ever does bound, which is very rarely the case even in frozen timber, you may know that you have got a "hard" if not a "knotty" case.

A wedge of this make will split or cleave timber for rails, etc., in a much better manner than those of the usual "chubby" kind. All practical "rail-splitters"—I mean those who are masters of the trade—know the importance of having the opening made by the wedge at the point, when "driven home," as large or as near the same size as that at the head as possible, for when the part first entered is opened wide, (which is usually the case with chubby), while the under or inner side is but little if any opened, it is quite impossible to "heart" or otherwise divide even the best of timber to advantage.

Mr. F. recommends having the "edge end in-laid with steel, but not hardened." This may be a good thing, but I am inclined to think that a steel point will not "go down" in frosty timber with mine, which is made of good iron and hardened, but not so hard that it will not bend rather than break.

Brother "rail-splitters," try one made as above mentioned—nine inches long, two in width, one and a half inches thick, etc., and report through the Country Gentleman.

R.  
Newark, O.

## Shrubs.

Although shrubbery, properly planted and cared for, constitutes one of the principal attractions of the garden, yet it is strangely neglected even in many gardens which, in other respects, are all that could be desired. Whether we consider the variety of form and foliage, the attractiveness of bloom, or the ease of culture, this department of the flower garden is certainly worthy of more attention than it has hitherto received. As the time has come when shrubs should be planted, a few remarks concerning them may not be amiss.

As most shrubs commence their growth very early in the spring, they should be planted as early as the ground is in fit condition. Where new plants are wanted, cuttings should be immediately made and kept in sand until the weather is sufficiently mild to permit their planting. In many of the varieties, plants may be grown from cuttings with as much ease as currents or gooseberries.

In general, shrubs should be planted in groups or clumps rather than singly, although a single plant of the large sorts may be grown as a specimen, with good effect sometimes. Of course the number of shrubs composing a group must depend a good deal upon the size of the grounds. In a large place the number of shrubs in a group should not only be greater, but larger shrubs, even approaching the size of small trees, may appropriately be employed.

The soil for shrubs should be a moderately enriched garden loam and should receive a slight top-dressing of well rotted manure each season.

But little pruning is necessary. A stiff, formal shape for shrubs is not at all desirable, but a natural form should be kept, free from straggling and deformed branches.

In planting a clump of shrubs, if on the borders of the garden, the largest size should be planted at the back and smaller ones in the front, the latter hiding the naked stems of the former. If in the open ground, the large ones should be planted in the center and the dwarfier sorts around them. The forms of the clumps may be various, round, oval, palm-leaf or irregular; any shape being preferable to those with acute angles, as triangular, square, etc.

A list of select shrubs is added, which is not to be considered as comprising all that are desirable, but only a few of the best and most easily cultivated. Of large sorts I would name:

*Althea* or *Rose of Sharon*.—Desirable on account of blooming in the autumn months, when few shrubs are in flower.

*Chionanthus* or *White Fringe*.—This is a fine, large shrub, with large leaves, and flowers in long bunches of fringe-like appearance.

*Cornus* or *Dogwood*—the red branched variety is very ornamental.

*Cydonia Japonica* or *Japan Quince*—is a very beautiful shrub, with scarlet or blush flowers.

*Currant*—The flowering currants are all fine shrubs, with various colored flowers, of very easy culture.

*Euonymus* or *Burning Bush*—with ornamental fruit in autumn.

*Privet*—A well known hedge plant. Fine in shrubbery.

*Philadelphus coronaria* or *Syringa*—A well known fragrant shrub. Very desirable.

*Rose Acacia*—A handsome spreading, irregular shrub with long clusters of rose-colored flowers.

*Syringa vulgaris* or *Common Lilac*—well known.

*Syringa persica* or *Persian Lilac*—more delicate than the common lilac.

*Viburnum Opulus* or *Snow-Ball*—Well known.

Of the dwarfier sorts the following are desirable:

*Amygdalus* or *Almond*.—The double flowering dwarf almond is beautiful, and too well known to need any description.

*Berberis* or *Barberry*—Pretty shrubs.

*Calycanthus* or *Alspice*—with fragrant wood. Flowers dark brown, of a peculiar and agreeable odor.

*Deutzia*—A beautiful family of shrubs, of which *D. gracilis* is the smallest and most beautiful. This variety should be found in every collection.

*Kerria Japonica* or *Corechorus japonica*—Yellow flowers.

*Peonia Moutan* or *Tree Peony*—Fine shrub, with magnificent large flowers.

Roses of all sorts.

*Spireas* of various kinds—all beautiful.

*Weigelia*—One of the very best dwarf shrubs, fine in foliage and form, abundant and beautiful in bloom. Some of the recent introductions are especially desirable.

Every garden should contain specimens of the *Weigelia*s, *Spireas* and *Deutzias*. G. B. H.

—(*Country Gentleman*.)

## Some of the Profits of Sheep.

Last year I sheared four hundred and sixteen pounds of good clean washed wool from fifty-nine sheep, being about seven pounds per head, which sold for forty five cents, averaging me \$3.17 per fleece. I raised from the flock thirty-seven lambs worth five dollars a head, which amounted to \$185. This added to the wool money makes \$372.20. My sheep are Spanish Merino, and mostly breeding ewes. I feed with tame hay and but little grain. I have forty-one in one flock that I feed half a bushel of brand and oats mixed about half and half, once a day, and they will gain on that from the time they are taken up in the fall until spring.

I notice in a late number of the *Farmer*, that something has been done in the way of examining the fineness of wool; I suppose I can show as fine merino wool as there is in the country, but the finest wool is not to be found on the best sheep, nor the most profitable. I have seen very fine wool on small sheep which I would not consider worth wintering on account of their being tender and sheering very light fleeces. I am in for the fleece that will fetch the most money and keep easy.

I shall hold myself ready to shear bucks or ewes against any sheep in this State, of one years growth of clean wool.—*Michigan Farmer*.

[For the Illinois Farmer.]

## Orcharding at South Pass—Low Headed Trees.

DONGOLA, Union Co., April 18, 1862.

M. L. DUNLAP. *Dear Sir*:—A recent visit to South Pass in this county, and a view of the various orchards in that place, convinces one who have seen the fruit business carried on elsewhere, that this is destined soon to be one of the most attractive places to the pomologist in North America. Instead of referring this matter to the future, I might say that the thing is already accomplished, for there are thousands and thousands of peach, apple and pear trees in bearing, but for the most part they are young. There are as large orchards in Jersey, Delaware, Maryland and Virginia. I notice that in the battle now being fought before Yorktown, a part of our troops now occupy one of these orchards—a dreadful blow to the man who took the pains to bring it into successful bearing. But I think that in a few years this section will far surpass anything that can be seen perhaps in the world.

A Horticultural Society meets every other Saturday to discuss subjects most interesting to fruit growers. G. H. Baker is President and P. Earl the Secretary. A considerable discussion is taking place with reference to low headed trees, cutting back early—and also respecting shallow planting. Those best posted, or who claim to be, pronounce the following to be the very best. It is certainly the latest method of planting trees.

First dig a hole as deep as you please, and then fill it up when you plant your tree on the level of the ground, then throw up a mound around it and let it grow. If the tree is one year from the bud, it is previously cut off eight or ten inches above the bud, no matter whatever, if it have buds or not, it will sprout out. A peach tree is permitted to send forth four shoots so as to make what is called a distal or inverted umbrella frame; afterwards, late in the winter one-third of the previous years' growth is cut off. Such trees, will bear, it is claimed, three years sooner than by any other treatment, and the center of the tree being kept open, the fruit ripens finely, and is easily picked by one standing on the ground.

I saw some trees on Mr. Baker's ground which had been treated in a manner somewhat similar, and it does appear to me that this is the right theory, at least I never saw trees bear so young or look more thrifty. I would remark, by the

way, of Mr. Baker's farm, that though its area is not so extensive as many others in the vicinity, yet for picturesque of situation I have seldom seen it equalled. I should have remarked as many are aware, that all their farms are on high hills, and that they are seen from each other, making a scene not dissimilar to what one fancies of the robber castles on the Rhine.

In conclusion I would say that fruit growers are greatly attracted to this region, and there seems to be a promise that, both native trees and people are likely soon to be numbered among things of the past. The manner in which the fruit business is here carried on, is indicative of the greatness of our State, and well compares with the vast grain interests of the prairies.

N. C. M.

— We are having line upon line in regard to low headed trees, as one after another falls into the practice. Last week we were setting an orchard of one hundred and fifty of sweet apple trees; wishing to set twenty of the Late Golden Sweet, we could find none less than four years old, averaging over an inch in diameter, with nice heads three feet from the ground, but in went the shears and the trees were headless, with stumps a foot high. Some of our customers look on these stumps with wonder. "Such nice heads! what possessed you to cut them off?" was the question from more than one. Well, friend, can't you see we are growing gray with age—may not be spared a long life to wait for fruit on the high headed trees, but will stand a reasonable chance of doing so from the stumps. Come and see them three years hence if your and my life is spared, and you will probably find them in fruit. Yesterday a farmer came after trees, and would like to see those with low heads. We led him to a lot of five acres that had not been pruned at all, most of them heading at the ground. "Well," says he, "those just suit me. Three years ago, I received a hundred trees from Ohio, or rather brought them with me; after setting, an ox got into the orchard and broke several of them down near the grown. I was much vexed at the time, but these trees are double the size of the others, and with such beautiful heads that I now regret the ox had not served the whole lot in the same way. The trees broken down will fruit this year, while on the others there is no sight of fruit. Give me the low heads."

If low heads are so much more valuable in the timber lands of Egypt, what shall we say of the prairies?

Ed.

## Rules for Butter Making.

I will endeavor to give the general outlines, the essential leading principles, without attempting to give all the exact details, as it would be a much easier task to teach a man how to make a watch, than how to make the first quality of butter; as it is the most sensitive it is the most liable to injury, of all the eatables extracted from the vegetable kingdom. The first important thing for making butter, is the cow. Without stopping to give a full description for selecting, she must give good rich milk, as first quality of butter cannot be made from poor milk, as poor milk lacks the essential quality of good butter.

The idea of coloring butter with anything after it is made, is as absurd as would be painting rye bread to make it white, with the exception of changing its flavor. Butter is so sensitive it partakes of everything that can effect it, that it comes in contact with; as onions, carrots, parsnips, turnips, fish, or anything else that would make it unpalatable, either in the butter or milk churning. Not only so, but the butter partakes of everything the cow eats or drinks, and the longer it stands after being made, the more perceptibly will the unpalatable things on which she has fed make themselves manifest. By this it will be seen that the most important thing for first quality butter, is the food for the cow. Neither from roots of any sort or kind, or grain of any description, can first quality butter be extracted. It must be from something that imparts a sweeter and finer flavor, and from nothing that grows in this country that I know, except timothy, white clover, blue grass, red-top and fowl meadow, can first quality butter be made, that will stand the test so as to remain sweet until the next winter or spring after it is made; and each of these grasses must have been sown or seeded down sufficiently long, and so well cared for as to have a sod thick enough to make it produce a fine solid grass, to make it a perfect dairy pasture, though many other pastures will make good butter for immediate use, but not to keep. The cow too must be well wintered, however good she may have been to make good butter, because if poor her milk will also be poor and white, and of course the butter ditto. Your correspondent says, "if you had seen as I have done, the farmer's wives and daughters with tears in their eyes, when told that the product of their summer's labor, as shown in their butter, was a poor article, etc. For none of these things are the dairy women in the least responsible, and no one else but the dairy man, or provider of the cow's food; yet in this, as in many, very many instances, the wrong persons are held accountable for things over which they have no control. The manufacturing is an essential part of the business, yet the neglect of any of the above requirements is fatal to a first-rate dairy for winter use.

The cow must be looked after as soon as she comes in, and milked sufficiently often to prevent her bag from becoming feverish and oaking, as one milking from a feverish cow would spoil a churning, and that would spoil a whole firkin in which it was packed, though it might not be per-

ceptible for immediate use, and none but the skillful butter maker would perceive it in the churning of the butter. Such milk froths and foams, and when it does this, as well as from other causes, it is always safest to sell it for immediate use, or pack it separately in a firkin to sell for what it will bring. The churn should be as nearly straight up and down as possible, and the dash should stir all the milk every stroke it makes, so that the butter in the churn should all come at the same time. If the milk is too cold, the only safe way to warm it is to place a pail of milk in a large boiler of warm water, to bring it to the exact temperature, which is about 55° to 60°—a few degrees warmer in cold than in warm weather. As soon as the butter has come and gathered, take it immediately from the churn in its warm state, and put it in a large wooden bowl, which is the best vessel for the purpose, then put it in cold, soft water; then commence pulling the butter over with the ladle in so gentle and careful a manner as not to affect the grain, for as sure as that is injured at the washing or working, the butter becomes oily and can never be reclaimed. Every particle of milk must be washed out, and then season with the best of Liverpool salt. Set the bowl away until the next day, and when sufficiently cool, work the mass thoroughly, but not so as to affect the grain, and on the third day pack it away if it has assumed the right color. Examine it well before packing, and be sure that no milky water runs from it, for as sure as it is packed with the least drop in the butter, you will hear from it the next March or April. The sooner you dispose of unwashed butter the better, as milk would not harm it much for immediate use.

If your spring or well is hard water, I would advise saving ice from rivers or streams, though the water is hard, as the lime never congeals with the ice. Save rain water, and then with ice you will have water sufficiently cool to wash your butter, without which no man or woman can get the milk out without injuring the grain, so that the injurious effects of the lime water will not exhibit itself in six months. Soft water is as indispensable to wash butter as fine linen. From all this I do not wish to be understood that washing butter is positively necessary if it is to be used within a few weeks.

A. B. D.

## Bees in Spring.

Hives should be examined, to see if the swarms are in good order, and have sufficient stores. It is not sufficient that there is an abundance of bees; there must be enough food to enable them to live and breed, until the flowers can supply them with new stores. Last year, many that got through the winter well, perished in spring by starvation; the weather in the early part of the season being too wet and cold to produce honey, or allow the bees to fly out and forage.

If there is not enough honey in the combs supply the bees either with surplus honey, or lacking that, sugar candy will be an excellent substitute. Unbolted rye meal is greatly recommended as a



substitute for pollen; but if the alders, or other trees and shrubs that supply pollen are in bloom, all artificial articles will be discarded by the bees. Hives with flat bottom boards, and in fact, all others, are the better for cleaning, removing any dead bees that may have fallen from the combs. Should the moth prove troublesome, which is seldom or never the case in strong swarms, and your hives are supplied with movable combs it is best to transfer the frames to a new hive, taking care to rid every frame of web or worm on removal. This can be done best in a close room, on a clear, mild day; placing the hive, after transfer, on the old stand. It is dangerous to do this before there is a good deal of food to be had, for otherwise, the bees from other hives may rob the disturbed one; and besides, the latter consumes a great deal more by being disturbed than they would do if let alone.

It must be remembered that it is from the strong swarms in spring that you will obtain the greatest amount of surplus honey the coming season. Such swarms have enough food, with room to breed, thus providing a host of workers to secure sweets that nature provides in proper season; weak swarms cannot do this. Sometimes a swarm is weak in consequence of too much food being stored in their combs, thus giving no chance to increase, as empty comb is the nursery for young brood.

When this is the case, which is easily discovered by examination, remove a full frame or even two from the outside; shift those adjacent into the place of those taken away; then go to some hive deficient in honey, remove from that an equal number of frames, giving them the full frames instead; and finally, place the empty comb in or near the center of the first hive. You will, by this means, equalize the space and food in both hives, and consequently benefit both.

Hives stored in winter quarters should be taken out immediately. We are not, however, great believers in winter shelter, or any artificial means by which the early rising of brood is furthered.—*Ohio Farmer.*

The "American Fruit Culturist" gives the following explanation of Pomological Terms:

**Alburnum**—The sap-wood, as distinguished from the heart-wood.

**Border**—Artificial bed of enriched earth.

**Callus**—Ring or swollen portion formed at the base of a cutting, by the descending cambium.

**Cambium**—The soft wood, newly forming beneath the bark.

**Canes**—Long, bearing shoots; applied to grapes and raspberries.

**Clipping**—Trimming down to some definite shape.

**Coxcomb**—Applied to the form of strawberries when much compressed at the sides.

**Crenate**—Notched or cut around like rounded or blunt saw teeth.

**Dwarfs**—Trees made diminutive by grafting or budding upon stocks of small growth.

**Espalier**—A tree trained flat upon a trellis.

**En quenouille**—Training to produce fruitfulness, by tying the branches downwards.

**Fibrous roots**—The smaller, branching, or thread-like roots.

**Forcing**—The early ripening of fruits by artificial heat under glass.

**Fore right shoot**—The terminal shoot of a branch.

**Head back**—To cut off the limbs of a tree part way down.

**Lay in**—Applied to selecting and fastening to a trellis or wall, new branches or shoots.

**Lay in by the heels**—To bury the roots of trees temporarily in a trench.

**Leading shoot**—The longest or main shoot of a limb or tree.

**How CAN THOSE ANTS BE DESTROYED?**—In regard to this query, J. H. F., of Macoupin county, Ills., writing to the "Country Gent," says:

"They are almost as troublesome as the plagues of Egypt. I will tell you what they do, and you can judge for yourselves. They made their appearance first nine years ago, when the house was built, and in numbers have increased every year until the last, when they were almost intolerable. In the spring of the year when the weather is warm enough for them, they show themselves on the surface of the ground around the house in vast numbers. They then make their way into the house, visiting every department where they can find anything to plunder that suits their taste, among which are flour, meal, meat, and in fact everything of a greasy nature, passing independently over sugar or any vessel containing sweetening. In a box of bacon packed in ashes last summer they made great depredation, having a narrow strip for a highway to the wall of the house, and when warm enough they were constantly passing and repassing, until their track was plainly marked with grease. The only way discovered to keep them out of a vessel is to sit it in another and larger one containing water, or put the article to be kept from them on a bench, and keep the legs well tarred with fresh tar. They are of a light yellow color, and are very small, so small that six of them are not larger than the head of a pin, and it is difficult to detect them in anything of their color. If any one having some experience in ridding a place of that sort of ant will give information how to do it, they will confer a favor on at least the inmates of one dwelling."

**COAL TAR AND ROSIN.**—A correspondent of the "Country Gentleman," says an article appeared in that paper inquiring whether coal tar and pitch applied to timber would preserve it from decay while under ground. The past year I have been experimenting with preparations of that kind, for the purposes aforesaid, and believe I have discovered a sure remedy or preservative of decay, which can be made as follows:



Take equal parts of coal tar and rosin; heat them until the rosin shall be dissolved, and well intermixed with the tar; then apply it to that part of the timber you intend sinking in the ground.

To test the virtues of such a preparation I took a sap shingle, split it in two pieces, one of which I smeared with coal tar and rosin; the other I left uncovered. I then drove them side and side in the ground. At the end of nine months I took them up, and found the progress of decay to have been very rapid in the piece uncovered, while the other was perfectly sound. This experiment fully convinced me of the efficacy of such a preparation, and if properly applied I believe all kinds of timber would be indestructible by decay. For posts I hardly think it necessary to cover more than twelve inches below and six inches above where the surface of the ground will come, as that part of the post is more exposed to the action of the elements, consequently needs the most protection.

I have not time or I would write more on the subject, as I consider it a very important one, and one of much interest to the farmer or real estate owner. And yet heretofore the preservation of timber has received but a small share of consideration in comparison with what has been said and written on other subjects.

**The Vincennes (Ind.) Sun** says that Daniel Elliot, of that vicinity, realized, the present season, from 210 maple trees, 860 pounds of sugar and ten gallons of molasses.

**In** a voluminous historical work, where a thousand trivial occurrences must be recounted, many dry subjects discussed, it is imagination alone that can carry the reader through the mass of details, and "float truth down the flood of time."

**Not** less than 262 new canal boats of the largest size will be ready on the opening of navigation. So says the Albany Evening Journal.

**"Pa ain't I growing tall?"** "Why, What's your height, sonny?" "Seven feet, lacking a yard." Pa fainted.

**"How long did Adam remain in Paradise before he sinned?"** asked an amiable spouse of her husband. "Till he got a wife," was the calm reply.

**It is** justly said of woman that she divides our sorrows and doubles our joys. Pity she quadruples our expenses.

**We** are commanded to let our light shine before men; the man with a red nose keeps his light shining before himself.

## Cost of Raising Corn.

The "Country Gentleman" has an article on the cost of corn growing, which we copy below. Twenty-one dollars and seventy cents an acre for the cost of corn, with sixty bushels to the acre, may pay in Northern New York, but not so well on the prairie. As will be seen, the stalks are valued at five dollars the acre, leaving the cost of corn at twenty-seven cents. It is not probable that another as favorable a case can be found as this in that part of the State. Taking one year with another, twenty-five or thirty bushels may be considered a fair average yield with this high culture. St. Lawrence county may as well give in to the prairie first as last. ED.

"We had always been surprised that western farmers could raise corn at a profit, at prices varying at from fifteen to thirty cents per bushel; but the past year we kept an accurate account of the cost of our corn crop, and can easily believe that on the fertile and easily cultivated lands of the west, where horse power can be used instead of the hoe, corn can be profitably raised at the above prices.

Our cornfield consisted of three acres. It had been mowed for three years previous—was strong, and required two yoke of oxen and two men to break it.

To 4 days work plowing.....	\$10 00
3 day's drawing manure with two men and team.....	6 75
Spreading manure.....	75
Harrowing.....	3 00
Chaining both ways.....	50
Three day's planting.....	2 25
Three pecks seed corn.....	75
Interest on land at \$30.....	6 30
Three hundred pounds of plaster.....	90
Plastering.....	62
Cultivating both ways three times....	3 75
Twelve day's work hoeing three times..	9 00
Four Day's work cutting.....	3 00
Husking and drawing in corn and fodder.	10 00
Sixty loads of manure at half price on account of future benefit.....	7 50
Total cost.....	\$65 09
Corn Fodder.....	15 00
	<hr/> \$50 07

Three hundred and seventy bushels of ears at a cost of twenty-seven cents per bushel shelled corn—showing that corn can be profitably produced even in this stony country.

ST. LAWRENCE.

St. Lawrence Co., N. Y.

**Women** can easily preserve their youth; for she who captivates the heart and understanding never grows old.

### Post and Board Fence.

The best fence is probably the above, especially on the prairie where the wind sometimes plays the dickens with the old worm fence. The sod and ditch fence is out of date, having proved of no value. Wire fence is used in some parts of the State, and when well put up of No. 9 wire makes a good fence. But all things considered, the post and board fence is the best and in most cases the cheapest for Central and Northern Illinois, while the cost of boards and the abundance of timber in most parts of Egypt gives the advantage to the old Virginia form. We have just completed 200 yards of post and board fence, and give the cost. The posts we use are burr oak, from not over two feet in diameter—we have some thousand of such on our farm at Leyden, most of them set twenty years, and from present appearance they will at last double that time yet. The posts are large size, as a matter of course.

400 posts in the woods, 4c.....	\$16.00
Hauling seven miles.....	12.00
Four days sharpening, \$1.....	4.00
Two days hauling on to the ground.....	4.00
5,000 feet fencing in Chicago, \$9.....	45.00
Freight, 4c.....	20.00
One keg nails.....	4.00
Five days driving posts, \$1.....	5.00
Five days for boy and team to assist:..	7.50
Nailing on boards, two boys 2½ days....	3.75
Staking out line, unloading lumber, etc.	75

\$122.00

Or an average of sixty one cents per rod. This is for three boards to the panel, the usual fence against cattle and horses. Farmers in this neighborhood confining their hogs in pastures made hog tight, thus making a large saving in the cost of fencing.

To the above should be added the cost of hauling from the depot, in this case the car was unloaded on the farm, thus saving the cost of hauling three and a half miles.

Here is a fence that, with little repair, will last thirty years and probably longer, and for every thing, except sheep and hogs, as though two more boards to the pannel were used. The extra two boards would have added full twenty-five cents more to the rod or per cent. This is paying rather dear for the privilege of having hogs run at large, a sum that our reading, thinking farmers have concluded not to invest in.

Oak boards cost more than pine and are not half as valuable; they not only warp badly, thus breaking off the nails, but rot off at the knots and other places just when you are not

looking for such a condition of things. We have seen poplar poles used in place of boards—that is the common Aspen of our timber wet lands—these are spotted on to the posts and nailed the same as boards. We omitted to say that we are careful to set the top end of the post in the ground, thus reversing it in the order of its growth. From numerous instances in which we have examined old fences we know of a certainty that they will last much longer thus treated. We can see hedge fences in the dim future stretching their long line over the prairie swells, and making the country beautiful with their ridges of living green.

### Subsoil Plowing.

Thanks to John Deer for a first rate subsoil steel plow—it is one of the institutions that should find a place on every farm. We have used one for the past two years, but have not so fully appreciated its value as at present.

The continued rain, rain, has put us in the back ground in regard to nursery work. One day last week the sun came out for a short time and we had two teams harnessed, one put to a No. 1 clipper, turning up seven inches of the water sodden soil, while the subsoil went five more into the soil, loosening up the bottom. At night we had one of the heaviest falls of rain of the season, but the next day in the afternoon we could work on this plowing, the water sank into the loosened bottom, and the surface was ready for the plants. Acting upon this discovery, we have since made rapid work with our nursery planting, by paying little attention to the weather. Should the weather continue wet, we shall go into the corn field with the subsoil plow, and if we get over only half the ground with the same teams, we shall lose little time and be sure that we have a dry surface. Farmers, this is a good time to test the value of the subsoiler.

**A PORKER.**—The *Ossipee Register* says that Asa Beachman of that town, recently slaughtered a monstrous porker of one year's growth, that weighed 710 pounds.

**EXCELLENT WORKS.**—Pope's Essay on man, and Pope's Essay on the Rebels at Island No. 10. There are fine passages in both.

 Morning is the best time to work gardens.

(For the Illinois Farmer.)

STERLING, WHITESIDE Co., April 1862.

FRIEND DUNLAP:—I am anxious to get a copy of your last years number?

(Last years number exhausted.—PUB.)

The Executive Committee of the Whiteside County Agricultural Society, will meet sometime in May, at which time I will suggest that a number of copies of your paper, may be used as awards at our county fair, Please name your premium terms.

(Fifty cents a copy to any address.—PUB.)

A WORD ON HORTICULTURE.—I received a few days since a letter from an old friend, Charles Downey, and was gratified to learn of his continued zeal in the cause, and regret to say that I cannot say as much for myself, not that I have lost confidence or interest in the ultimate success of fruit growing, especially the apples, but it is that every year more and more fully convinces me that it will require years of careful experiment and experience, to decide on such as are best suited for cultivation in this peculiar locality —(Northern Illinois). Need I say that from the great losses sustained in this northern portion of the State for the past five or six years by those attempting to raise fruit and fruit trees, that many of us have been obliged, in order to maintain ourselves, to engage in a general farming interest, or in some other business.

The depressing effects of the war on all our operations, have been such that I have concluded to rest and "bide my time." And hereafter, you may expect me to be with you "through evil, as well as good report."

I will read a short article on flax before our association at its next meeting, if you are with me in the views there entertained, especially on protection, publish it. That you are with us, in a protection for the industry and labor of the State, I entertain not a doubt.

Very truly,

L. S. PENNINGTON.

—To Dr. Pennington is due the first demonstration in the way of low headed fruit trees, and for the past fifteen years the Doctor has labored to inculcate his views. The winter of 1855 nearly ruined his magnificent orchard, which contained too many tender sorts. We shall hope for the sake of pomological history, that the Doctor will give us the history of his orcharding,—of varieties, height of head cut. Shall we not hear from you on this subject at an early day? Now that the public mind is ready to hear arguments in favor of rational culture, you will find eager readers.

Ed.

(For the Illinois Farmer.)

## Stock Laws—Are there Any?

MILTON STATION, Coles Co., April, 1862.

EDITOR ILLINOIS FARMER:—Do the laws of this State require every man to take care of his own stock, or is the stock of every man's free comoners at liberty to go just where they please?

Is not tame pasture more profitable (counting the cost of making such pasture) than the wild prairie pasture to which we have access free of charge?

These are questions of vital importance to the farmers and stock raisers; therefore, I for one, would like to have them fully discussed in the FARMER.

I have had some experience with stock running at liberty; it is, undoubtedly, a loosing game to all parties; it is a loss to the farmer. A few breechy animals lead the whole of the neighborhood stock just where they like; into the wheat field just as the grain is ready for stacking; knocking the shocks right and left, threshing the grain in the field free of charge. Next into the corn field, destroying three or four bushels, while they eat one. Finally when the wild grass is dry and the cold rains of November have thoroughly softened the ground, they are into the wheat field, treading the wheat into the ground by the acre, putting the ground in nice order to shake the strength out of your horses, and your reaper to pieces. Fine work this for sake of wild grass free of seeding and fencing, to say nothing of the pleasure of galloping for three or four hours over the prairie when you want your cattle.

Then it is a loosing game to the owner of the stock. Your stock gets into your neighbors field, out comes the neighbor in a fit of vexation, to say the least, chases the cattle with dogs. They are worried and loose the gain of two or three weeks; some of them are foundered and occasionally one dies, others survive to drag out a miserable existence wholly unprofitable to the owner, others again stray away and are lost or cost much time and trouble before they are recovered.

With tame pasture the grass starts much earlier in spring, and continues later in the fall than the wild grass. So here then is a saving of three to five weeks feeding. The grass is much better than wild, your cattle feed quietly, you know where to find them, know they are safe, know your crop is safe, and finally you are in no fear of a quarrel with your neighbor on account of your cattle.

Good stock laws we need. Let us hear this matter fully discussed.

More anon,

CLOD HOPPER.

We have given the law as it stands at present, in previous numbers of the FARMER. Our Supreme Court has been on both sides of the question. The county courts north of Springfield, as a general thing, decide that there is no law in regard to fencing, only as between adjacent farms, and that all others are trespassers who allow their stock to run at large. In the counties south the courts have decided that the common law is not applicable to this State, and permit stock to run at large, thus compelling farmers to fence against the large herds that are often owned by non-residents and parties who own no land, but live by plundering others. A more enlightened sentiment is now prevailing, and it will not be long before every owner of a hoof will be compelled to keep it on his own premises. There can be no question that the prairie pasture is the most expensive under ordinary circumstances that we have. In this county, the practice is to make every man accountable for the damage done by his stock, and if he wants to pasture them on the prairie, he must look to it that they do no damage. With the exception of the old settlers about the groves, a large portion of the fences are made with three boards to the pannel. As Clod Hopper says, it is a losing business to pasture on the prairie, as by pasturing your own land, you improve it annually, and have both certain and later feed for your stock. It is great absurdity to compel a farmer to fence against all the stock that some shiftless farmer, or some cattle feeder may choose to turn on to his crops. As no farmer can keep stock and raise grain without confining the farm, it follows that he must fence in one or the other. He need not fence in the grain for that will not stray off, but as his stock will, and are liable to be injured by breaking into corn fields, it is the best economy to fence them in. But in the early settlement of the country, when little attention was paid to grain growing, and the stock interest was the most important, there was some excuse for allowing stock to run at large and to fence in the small patches of grain, though at present when the grain interest has become the most important, it would seem that common sense if not common laws should protect the farmer who wishes to cultivate grain, against the rapacity of the stock grown. We should be glad to hear from others on this subject.

Ed.

(For the Illinois Farmer.)

## A Saltpeter Cave in Pike County.

CONCORD, April 17th, 1862.

EDITOR ILLINOIS FARMER:—As the Chicago Tribune seems to call for information through your paper as to whether there is such a thing existing in the State of Illinois as a saltpeter cave, and as it seems to have some doubts about the matter, I would state for their information, and also others who may have any interest in the matter, that I visited such a place twice. The last visit I made to it was in 1855. At that time the remains of an arch where the boiling process seemed to have been carried on many years previous, were still visible.

At the time of my visit to the cave, no one seemed to take any interest in it, except as a curiosity. Stalacites were hanging around in the cave, but many had been broken off by those who had previously visited it. It is situated in a limestone-rocky bluff, on a stream called the Little Blue, west of the Illinois river, in Pike county, some eight miles easterly of Griggsville. Any person wishing to visit the cave, can call on Dr. A. Metour, who resides at the town of Milton, who would probably give any further information needed. The town of Milton is about ten miles south of Griggsville, and two miles from the cave spoken of.

M. J. POND.

Can any of our readers give us further light on this subject? Pike county is one of the most interesting counties in the State, many parts of the county contain ledges of limestone, and the surface is generally broken, the streams run through deep gorges, exposing the various strata of carboniferous rock. Situated as forming the peninsula between the Illinois and Mississippi river, it embraces many points of deep interest, not only to the geologist, meteorologist and the farmer, subject to heavy rains and again severe drouth. Were it not for her dry rich soil and the ready drainage, her now valuable farms would be worthless. Will not some of our many readers from that county give us a series of chapters on that interesting region of the State.

Ed.

A short man became attached to a tall woman, and somebody said that he had fallen in love with her. "Do you call it falling in love?" said the suitor. "It's more like climbing up to it."

An Indian on seeing a fashionable lady, exclaimed: "Whoop! Big wigwe."



DON'T KILL THE BIRDS.—We call the attention of our people to the following city ordinance. We understand the city authorities have determined to enforce it to the very letter.—*Chicago Tribune.*

AN ORDINANCE to prevent the killing of Birds in the City of Chicago.

SECTION 1. Be it ordained by the Common Council of the City of Chicago: That the killing of birds by fire-arms, bow and arrows, stones, or in any other mode, in the city of Chicago, is hereby prohibited. Every person who shall hereafter kill or wound, or attempt to kill or wound, by the use of fire-arms, bow and arrow, pelting with stones, or otherwise, any bird within the city limits (such bird so killed or wounded, not being the property of the person so offending), shall forfeit and pay to the city for every bird so killed or wounded, and for every such attempt to kill or wound, not less than five nor more than ten dollars.

SEC. 2. Every person who shall enter upon any private inclosure or public ground belonging to the city, for the purpose of doing any act prohibited in the preceding section; and every person who shall shoot an arrow, or throw a stone, or club, or other missile, at any bird within any private grounds, or public parks, squares or grounds, shall forfeit and pay to the city not less than five nor more than ten dollars for each offense.

—Among the board of aldermen is a large number of practical horticulturists, who have looked on with amazement at the swarms of insects that promises to make gardening no success and green things a rarity. Every boy old enough to hold a pop-gun or cross-bow in the city, have of late years been diligent in driving out the birds, by breaking up their nests, killing and wounding them. The result is there, as well as everywhere else—an increase of insects. We shall now look forward to an increased attendance to the fitting up of suburban residences in and about the city. Other towns and cities would do well to follow the example of Chicago in this good work.

Ed.

Fair of Illinois State Agricultural Society.

This fair is to be held at Peoria, commencing Sept. 29th and ending Oct. 4th.

That the people of Peoria city and county will do ample justice in the premiums, we have good evidence, from a previous occasion, and we can assure our readers that they will find things done up and in order when they reach the fair grounds.

The premium list is now ready for distribution and can be had on application to the Secretary,

at Springfield, or of any officer of the board. The premiums are numerous and liberal, every farmer and mechanic will find something in it for which they may compete. Do not fail to obtain a copy.

Among the minor premiums is a large number of the Journal of the Society, a valuable work for the farmer. We should be glad to see the medal dispensed with and agricultural works and cash substituted, in all cases.

Here is something for the boys.

PLOWING AND SPADING MATCHES.

To commence at nine o'clock A. M., on Thursday, September 19th, and continue at the discretion of the committee.

First premium.....	\$15
Second premium.....	10
Third premium.....	5

BOYS UNDER EIGHTEEN YEARS OF AGE.

First premium.....	\$15
Second premium.....	10
Third premium.....	5

The plowing will be in old ground, and competition open to the world.

The name of plowman must be given, as well as the kind of plow to be used, at the time of entry.

RULES FOR PLOWING.

1. The quantity of ground for each team to be one-fourth of an acre.
2. The time allowed to do the work will be two hours.
3. The width of the furrow to be eleven inches, and the depth not less than six inches.
4. The furrow slice in all cases to be lapped.
5. The teams to start at one time, and each plowman to do his work without a driver or other assistant.
6. The premiums offered by the Society will be awarded to the individuals who, in the judgment of the committee, shall do their work in the best manner, provided the work is done in the time allowed for its performance.
7. No person except the Viewing Committee will be permitted to enter upon the ground after the work is commenced, until the committee leave the ground.
8. Each plowman to strike his own land, and plow entirely independent of the adjoining land.
9. Within the fourth of an acre plowed, each plowman will be required to strike two back furrowed lands, and finish with the dead furrow in the middle.

Best sub-soil plowing.....	\$10
Best trench plowing.....	10

To be done under such rules as the awarding committee may prescribe at the time.

SPADING MATCH.

The spading not to be less than ten inches deep. The time allowed to do the work will be one hour. For the best spading of ground ten feet long and ten feet wide.....\$5  
For second best.....3  
For third best.....2



## The Cultivation of Chinese Sugar Cane.

### TRANSPLANTING.

R. Tuttle, of Mishowaka, Ind., writes us that his experience in cultivating sorghum is that the crop will be forwarded in the spring at least two weeks by transplanting. He recommends soaking the seed in warm water until it begins to sprout, then prepare a small plat of warm ground, and sow the seed broadcast or in drills, one inch deep. If it be likely to freeze cover it with straw. When up to two or three inches, then transplant it in your well prepared ground, about the same manner as you do cabbage plants. Set about five plants in a hill. By transplanting the cane gets a decided start of the weeds, which is a great advantage; it will ripen two or three weeks sooner. The labor of transplanting is very small compared with the benefits.

### WILD CHINESE CANE HYBRIDIZE WITH INDIAN CORN?

Upon this subject, Lyman Meacham, Esq., of Lemont, writes us as follows:

"I see in your report of what was said and done at the General Sorghum Convention recently held at Adrian, Mich., that a number of the speakers express the opinion that sorghum will mix with maize (our common indian corn) to the detriment of the former. This may be so. One well established fact is worth more than any quantity of theory. But I am of the opinion that to produce the hybridizing or mixing of different varieties of plants, the varieties subject to change must not only be cultivated in the same vicinity, but they must also be in blossom at the same time, so that the pollen—the fecundating dust—produced by one of the varieties may be conveyed to the female organ of the other variety while that organ is in the condition to receive and appropriate it, otherwise no injurious effect will be produced by the near proximity of the different varieties of plants. Is this not so?

I have cultivated sugar cane almost from its introduction into the State, and have noticed its progress towards maturity. Compared with that of corn, and according to my observation, the corn crop is not in tassel and in blossom, and is entirely past the season for throwing off its pollen long before the sorghum begins to show its seed heads. This being the fact, how can the two hybridize? Who ever heard of maize and broom corn mirging to the detriment of either? Nature's laws are seldom violated.

If it be true that sorghum and maize will mix, the fact cannot be too soon known, and guarded against, for the fact is notorious that in this corn producing region, sorghum and corn frequently grow side by side, and in most cases they are grown in the immediate vicinity of each other. If the opinions alluded to are correct, a different course must be pursued by the growers of sugar cane seed, or we shall soon have none worth planting.—*Chicago Tribune.*

## A Word about Colts—Early Training.

An impression, and I think an erroneous one, prevails with many that colts are injured by early training. That some colts are injured, and their constitutions broken by cruel and rough treatment, before they have acquired their strength, cannot be doubted; but careful, judicious training, is as important with colts, as with steers, or with children even. In fact, I believe it true of all young animals intended for domestic use, as of a child. "Train them in the way they should go, and when they are old they will not depart from it."

I have two colts, one eight months old, and the other one year and eight months. They are both accustomed to the harness. The oldest I have frequently used in the sleigh. On one occasion this winter, when the sleighing was good, it has taken me, together with my little son, to Portsmouth and back, a distance of nine miles each way, with no inconvenience or injury whatever. Some persons who knew the age of the colt, and the distance it travelled, remarked to me, "You will kill that colt."

This remark induced me to write this short article. Without knowing the circumstances, the reader, perhaps, would form a similar judgment—but the colt is large of its size, in good condition as to flesh, and high spirited; and, I required it to walk at least two-thirds the distance each way. It is well fed in the city, taken through the streets where it could hear various sounds, and witness all sorts of objects—still it was not suffered to tire or scarcely to sweat at all, and to every appearance was as lively and bright when I reached home, as when I started. To have forced it beyond its strength that distance or half that distance, would have been injurious—but careful training is always beneficial and we rarely begin too young with anything.

Lambert Maynard, Esq., of Bradford, Mass., the owner of one of the finest stallions in New England, (Trotting Childers,) who has had much experience in raising and training colts, and who has sold some fine colts of his own raising, at a high figure, informs me that his colts are all broken to the harness before they are a year old, or as he more properly calls it, educated. He rarely, if ever, uses a whip. As to its injuring them, to use them so young, he remarked, that he never exercised them so hard as they exercise themselves when alone.

So much for early training—and now one word about feeding and exercise. Colts should never be forced with provender, nor stunted for want of nourishing food. My method is to give them as much good, sweet clover hay as they will eat clean, with a few little potatoes; and with this feed I get as much growth in the winter, as with a good pasture, I get in the summer. On pleasant days, when there is no ice to injure them, they should always have their liberty, to exercise out of doors. It is cruel to confine a high-spirited colt constantly by his halter, as to confine a high-spirited, ambitious child, to the house.

Farmers, raise good colts; from the best of stock; keep them constantly growing, without pampering; give them judicious training when

—The proper arms for rebel privateersmen—yard-arms.

young; allow them every favorable opportunity for free exercise, and we shall have what every sensible man or woman admires, good horses.—*Cor. N. E. Farmer.*

**DUTCH CHEESE.**—The “farmer’s girl,” who can make “tip-top Dutch cheese,” and tells how it is done, is no doubt an adept in the art. I know a farmer’s wife who has made “lots of it, and thinks none can make better. She pours boiling water over thick milk in the pans. The curd should be moved gently with a large spoon, that the water may reach the bottom of the pan. The curd and whey will separate in a few minutes; pour off the whey, and if the curd is too tender, pour over it hot water the second time, and move the curd about as at first; then pour off the water, and put the curd in a thin, coarse cloth, and hang it up to drain an hour or two; then add salt, a little butter or cream, or both; work it in or make into balls. This way is preferable to heating the milk over the fire, or upon a stove, and is much less work and trouble. Try it and see if you do not like it better.

Mrs. LYMAN.

**TO DESTROY WARTS ON A COW’S TEATS.**—In answer to your East Bridgewater “Subscriber,” I would say that I have a young cow whose teats last spring were covered with warts. I took the water that baking beans, (common pea beans) had been soaked or boiled in, and washed the teats twice a day, for a week or so, using a shallow three-pint pan, so I could wet all the teats at once, leaving the water to dry on them. The warts all disappeared in two or three weeks, and the teats are now perfectly smooth and free from warts.—*Cor. N. E. Farmer.*

**THE TOMATO—ITS PROPERTIES.**—Dr. Bennet, a professor of some celebrity, considers it an invaluable article of diet, and ascribes to it very important medical properties:

1. That the tomatoe is one of the most powerful aperients of the *Materia Medica*, and that in all those affections of the liver and organs, where calomel is indispensable, it is probably the most effective and least harmful remedial agent known to the profession.
2. That a chemical extract will be obtained from it which will altogether supersede the use of calomel in the cure of disease.
3. That he has successfully treated diarrhea with this article alone.
4. That when used as an article of diet, it is a sovereign remedy for dyspepsia and indigestion.
5. That the citizens in ordinary should make use of it, either raw, cooked, or in the form of a catsup, with their daily food as it is a most healthy article.—*Repository.*

The world is twice as long from east to west, as from north to south. All maps of the world show this.

**COTTONIZED FLAX.**—During the past year a series of experiments, mechanical and chemical combined, have been made in Rhode Island, the object of which was to provide, as a substitute for cotton, a material that could be manufactured without any alteration of machinery now in use.

The object has been attained by the production of a material properly named cottonized flax.

The flax is pulled in the field by a machine which does the work of forty men. Either matured flax or flax not in seed may be used. As flax is cultivated for the seed a double crop may thus be produced—a crop of seed as well as of flax.

The dried flax, as gathered from the field, is first cut by machinery into suitable lengths, representing the staple of upland cotton about one and one eighth inch long. This process is performed by automation machinery with great facility and a little cost. The material is subjected to a steaming process in large vats, is then dried by machinery, rapidly revolving.

Next it passes through what may be called a ginning process, whereby the woody husk or chives is separated from the fibre. By chemical process the fibre is then exploded longitudinally, and assumes the required fineness of cotton. The whole process is rapid, simple and cheap.

In this form the material is successfully carded, spun and woven. Beautiful specimens of flax cotton, drawings, rovings, yarn and cloth, and also of flax mixed with cotton, have been exhibited to the Secretary of the interior and others by ex-Gov. Jackson, of Rhode Island.

As a material for mixture with wool the cottonized flax is vastly preferable to cotton. It combines in the carding process with greater facility. The yarn is stronger. The cloth is more durable, even more so than if made wholly of wool. The lustre of the cloth is improved. Flax wool also receives a dye with the same facility as wool itself.—*National Intelligencer.*

**PLOWING.**—J. H. S. writes to the “Boston Cultivator:”

“Few are aware to what extent ploughing land when wet injures the crops, to say nothing about the land. Last spring I plowed three back furrows on cord-stubble ground, when the ground was hard and dry. The remainder of the field I plowed soon after a heavy rain, when the ground was wet. The consequence was, I had nearly twice as much broom corn, and that too of a superior quality, on the land that was ploughed when dry.

“I also tried hilling potatoes when wet, but I shall never attempt it again. It is rather an expensive way of economizing time. It is said there is a time for every thing, but the time for ploughing is not when the land is wet.”

A father was winding his watch, when he playfully said to his little girl. “Let me wind your nose up.” “No,” said the little girl, I don’t want my nose wound up, for I don’t want it to run all day.”

### Causes of Ague.

The discussions in the Horticultural Society, March 15th, touched the causes and prevention of ague.

In a previous discussion it had been stated that ague always followed the clearing of timber lands, from the decay of deadened timber. The rotting of prairie sod was also instanced as a cause of ague in Illinois and the prairie country generally. True physicians have assigned this as a cause, but it is by no means a universal cause. The ague is more prevalent on these streams which have become nearly dry, as was the case with Mill Creek at an early day, and stagnate, or where the water in an overflow sets back, forming bayous, in which the water is stagnant in the autumnal months.

The early settlers of new countries, for convenience to wood and water, settle near streams, and often use the water from them, or sink a barrel in some wet spot in the edge of a slough into which the surface water drains. The use of the water of the stream and of the water of these shallow wells, seems to be a predisposing cause for ague, more universal than the rotting of the prairie sod. Settlers in a new country are cut off from supplies of fruit, and very generally make corn bread, hot biscuit, coffee and fried pork, the staples of their diet. Such fruit furnishes an excess of carbon to the blood—tending to prevent its proper oxygenation—and when this process of producing an excess of carbon is constantly at work, we see no necessity of limiting the cause of ague to the rotting of trees, sod, or malaria—the unknown cause of disease which has escaped the detection of all physicians. We know it to be a fact, that those who live on corn bread and coffee and pork, suffer more from ague than those who use vegetable acids and acid fruits freely. Their gross diet and lack of bathing, predispose them to autumnal diseases.

Mr. Reemelin stated that in Germany four times the quantity of vinegar was used that is here.

Dr. Warder, that the Community at new Harmony, on the Wabash, was broken up by ague—but that those English families who used vinegar freely escaped. Acid fruits have the same effect.

Our own belief is that whatever produces an excess of carbon in the blood or prevents its proper oxygenation, acts as a predisposing cause for the ague, supplying a necessary condition. Whatever favors the oxygenation of the blood—as fasting, bathing, and the use of acids, especially acid fruits—will cure it. Hygienic agencies will prevent and cure it.

If the whole list of drug-remedies were in the bottom of the sea, we believe with Dr. Holmes, "it would be better for the people, and worse for the fishes."—*Ohio Valley Farmer.*

A Welch editor says: "If we have offended any man in the short but brilliant course of our career, let him send us a new hat and say no more about it."

Girls play beautifully upon pianos, and our soldiers upon forts.

**GRAFTING WAX.**—A good grafting wax is made thus: Five parts of rosin, and one part bees-wax, and one part tallow. These should be melted over a quick fire and stirred together. A little skillet is the best for this purpose, inasmuch as when the wax becomes to be used, and be dissolved again, the iron vessel remains so much longer warm. For private use, where but little grafting is done, a common tin cup will do.

In grafting, the wax should be applied carefully so as completely to exclude the air, and neatly, so as to look well as a job. It is not necessary to "load" a graft with wax. If made properly, a thin coating is better than more. It of course requires no bandage.—*Germantown Telegraph.*

**TRANSPLANTED TREES.**—We would remind our friends that despite the showers we had yesterday and the day before, the ground is becoming very dry, and trees that have recently been transplanted will suffer, and many die, if not thoroughly watered and mulched. Just before night pour water freely about the roots, and, immediately cover with saw dust, tan bark, coarse manure or other similar substance, to prevent rapid evaporation, after which, a liberal watering twice a week will save most of your trees.

**UNITED STATES CREDIT.**—Yesterday the United States 7 3 10 bonds payable in 1861, sold as high as 105½, and United States 6's payable in 1881 sold for 105@105½. United States securities have not been so high since Mr. Lincoln's election. It is the best indication of the ultimate end of the national troubles. A nation whose bonds sell above par in the face of an immense national debt, need have no fears of bankruptcy.

**THE CURL OF THE PEACH LEAF.**—The "Ohio Farmer" says the remedy for the blistering of the peach leaf is to sprinkle the trees, just before opening of the flower buds, with a mixture compounded of equal parts of lime, flour of sulphur and soot, dissolved in water.

A farmer was asked why he did not take a newspaper. "Because, my father, when he died left me a good many newspapers, and I haven't read them through yet."

A Christian had better go to any place of amusement, than go home whining because he can't go.

"I'll take the responsibility," as Jenkins said when he held out his arms for the baby.

A tender legal question—The legal tender question.



### Raising Chickens.

Let the hen run with her chickens if possible; she will provide for them a great deal of insect food. Take a hint from this and afford them a great deal of animal food, of which nothing is better than ground worms. I had occasion once to examine the crop of a chick about a fortnight old, and there found about fifty insects that had been devoured in the course of a few hours.

Nothing is more mournful than the continuous monotonous peeping of a sick chicken; whoever has raised chickens during the cold storms of spring, had doubtless found one or more of the pitiful subjects among their brood that would die in spite of the best housing and nursing, thus breaking the hearts of all the little ones of his family. You cannot but feel very badly yourself when you think with what a contented, trusting cry, it nestles in the hollow of your hand and what confidence looked out of the little eyes when you took it up from the cold ground! From a little successful experience in curing such subjects, I will suggest what the chicks need, that appear sickly, standing by themselves, drawn up into a little round ball of down, from which comes forth a monotonous unceasing peeping, during the prevalence of a storm, or the blowing of the chilling wind of some raw day, is neither food nor medicine, but warmth.

The mother hen, true to the great law of seeking the greatest good of the greatest number, still scratches away with an occasional brooding over her little ones, though the weakly chick is dying in the corner. Give such chicks what they are dying for the want of, warmth during the prevalence of the storm, and they will, if not too far gone, rally and recover. I may note that these weaker chicks are usually the females, and hence the saving of them is the more important to the poulterer.

What degree of warmth does a sick chicken require? Herein lies one great mistake of those attempting to rear poultry; they take their own wants as regards the purity of air and temperature as the measure of what poultry need. Fowls require the purest of air and the natural temperature of their bodies is far higher than that of the human body. As an illustration of the first position I will refer to the instance above given, of the chickens carried through the winter, a portion in an open coop, and the remainder in an apparently well ventilated and cleanly kept apartment. I will recall to the minds of many readers how often their carefully protected fowls will come through the winter with weak eyes, the snuffles, lustreless feathers, and a generally dilapidated appearance; note also how common disease is among the poultry kept in the fancy bird stores of the cities, and how sensitive caged birds are to degrees of purity in the air which appear to pass unnoticed by their fellow human bipeds.

I would, by far, prefer to have my fowls pass the winter, goodly number of them together, in an open coop; protected but on the northwest, that has afforded them gratis the protection that much of the more valuable kinds receive.

To illustrate the second position, the degree of warmth a sick chicken requires, place your fingers a moment under a setting hen, or a hen

with chicks, and from the almost burning heat you feel there, learn a lesson; aim to give the weakly chick as high a temperature as that, to do which you must do far more than wrap it in cotton or wool. Place it for a while in a cotton lined basket over the stove, in a temperature which, judged from our own feelings, would appear to come pretty near the grade, "tremendous." Let the chick remain in this temperature until it appears to be thoroughly revived, then gradually accustom it the heat of the room, and when the weather returns warm, give it again in charge of the parent hen.

To some this may appear to be the wasting of words over a little matter. I cannot agree with such while I have reasons to believe that not far from one-half of the young chickens lost each season die, not from positive disease, but from a lack of vital heat sufficient to carry them through one or two cold storms. As to the trouble necessary, give the little folks but one lesson, and they will find no trouble in the future; indeed, to be frank, I write this more because I would save the feelings of the little ones than that I value the life of the chicks.

JAMES J. H. GREGORY.

—Mass. Plowman.

**TAKE CARE OF YOUR HARNESS.**—More damage is done to harness during the rainy weather of early and late weather than during all the rest of the year. Saturated with water, covered with mud, and often frozen so as to almost break when bent in necessary handling, unusual care should be taken to keep it well oiled and hung up in proper shape when not in use. Thus treated, it will not only last many times longer, but look infinitely better than when neglected in the usual manner.

As to the kind of oil, we know of nothing better than neats-foot, or the daubing used by tanners. To give the black color characteristic of new leather, a little lampblack may be added without detriment, though it is better not to use it until the second going over. Before putting on the oil, however, there are two important conditions which must be observed—cleanliness and dampness. The necessity of the first is obvious, and the last is not less important since the oil cannot penetrate the leather, and make it soft and pliable, if put on when it is dry and hard. One of the best ways to give the leather the requisite degree of moisture, is to wrap up the several warts of the harness in a wet cloth a few hours previous to oiling. But this trouble is unnecessary where washing has been resorted to for cleaning, as the oil may then be applied before the leather is entirely dry. The oil should be rubbed in briskly with a brush or cloth, so as to insure its absorption.

Varnish should never be used, as it closes the pores and renders the penetration of oil more difficult. Vegetable oils are hardening in their effects, and should never be used for that reason. Finally, let the application of oil be as frequent as need; not once a year, as is the rule with some, or almost never, as is the practice of many.

—Wisconsin Farmer.

# THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, MAY, 1862.

## Editor's Table.

THE Spring, thus far, throughout the country, has been unfavorable to farm operations. The frost was late in coming out of the ground, and with the exception of a few days in the last of March, we have had heavy rains, almost day after day: the consequence is that a small breadth of spring wheat has or will be sown, and but little plowing done for corn. It is not possible to put in the usual amount, as the season is too far advanced. When we do commence to plow for corn, we suspect that the soil will break up cloddy, and we again take occasion to urge the importance of using the roller on all such soils. PLANT SHALLOW and ROLL. Plowing in narrow lands and sink the dead furrow by extra passages of the plow—this will take off the surface water to a great extent. Do not forget to protect the old corn from the rain, as it may all be needed before the new crop is secured.

EVERGREEN SEEDLINGS.—The readers of the FARMER will recollect our notice of the efforts of Robert Douglass, of Waukegan, to grow evergreen seedlings (during our visits with the farm committee), and that he had made such improvements as insured success, when taken in connection with the damp atmosphere of the lake, which in this department is a valuable aid. A few days since Mr. Douglass sent us a sample of 2,000 of his Norway Spruce seedlings, one year old. The plants are the finest and most vigorous that we have ever seen, fully equal to any imported from either Scotland or France. We take

particular pride in the success of Mr. D. in this interesting department of the above culture.

The soil and climate of Waukegan appear well adapted to this end, and with the well known skill of Mr. Douglass, cannot fail to give good results. We learn that it is the intention of Mr. D. to enter more largely into the growing of both American and European evergreen seedlings, with a view to supply our Western nurserymen with good, reliable plants. Many of our Western nurserymen, ourself among the number, have endeavored to grow their own evergreen seedlings, but without encouraging results, and have had to resort to importations from Europe and the East, and it is therefore with no small degree of pleasure that we are enabled to announce the complete success of this experiment of our friend Douglass. We intend to make a visit to his grounds during the summer, and hope to be able to post our readers more in regard to them. The West needs more evergreens, but their cost thus far has been in the way, and so long as the demand keeps up with the supply, we can scarcely hope for much amendment, but we will have the advantage of the freight saved, which is no small item in the cost of evergreens.

STRAWBERRIES.—We have received from Wm. R. Prince & Co., Flushing, Long Island, N. Y., a catalogue of this plant, embracing 265 varieties, probably embracing the largest collection in the country. They are sold by the pair, dozen, hundred and thousand, at prices ranging from \$1 the pair to \$5 the thousand. Plants can now be sent by mail at sixteen cents the pound, thus giving those wishing the novelties in this line at a cheap rate, to obtain them. To all such we commend this catalogue.

CONCORD GRAPE VINES FROM IOWA.—The Concord grape has become the grape for the million, and is being planted in nearly every garden in the West. The demand has drained the nurseries of their last root, and yet there are hundreds who cannot be supplied. Among those in the West who were foremost to appreciate the value of the Concord, was James Smith, of Des Moines, Iowa. To provide for the demand he propagated it largely, but no demand came; the farmers could not so soon see its value, but nothing daunted, Mr. Smith kept on with his propagation, and last year found himself in possession of an immense stock of well grown plants.



Still biding his time, he made no effort to sell by advertising until the season was too far advanced for this purpose; the result is, he will advise the readers of the FARMER in time for them to avail themselves of his low prices and well grown plants. We received from him several hundred vines one year old, so large and fine that they astonish our customers. The express charges from Iowa was \$1.50 a hundred plants, and by the thousand would not be much, if any, over a dollar. Of course it is an unusual direction from which to order grape vines, but if we can get better grown vines and at just half what is charged for them at the East, we can see no good reason for not sending to Iowa for grape vines, for the amount at least beyond the home supply. For one we make the venture that the advantage of half price has pleased our customers, we retailing them at less than the cost at wholesale prices. We are for well grown cheap trees and plants whether grown at home or abroad.

**A WINE CELLAR.**—James Smith, of Des Moines Iowa, has a wine cellar 37 by 45 feet, ten feet deep with 22 inch wall—this looks as though he had some faith in wine-making, on the table lands of Iowa. Mr. Smith writes that the tree peddlars sold Concord grape vines a few miles west of him at one dollar and fifty cents each, when he sold better ones at a quarter of a dollar. Now this is in bad taste for the intelligence of the farmers in Western Iowa, or good for the humbugging tact of the peddlars. Well, if they only sold them a true concord, they done a good deed after all, as the children of the humbugged farmer will find the Concord no humbug when it fruits, and if the father paid for one plant what would have purchased half a dozen, the knowledge of this may be useful hereafter in the way of a hint to first inquire the price which a reliable man sells plants at before he gives his order to a mere adventurer, who has no other interest than to cheat the community, this year in plants, next year in tomb stones, and the next in some patent nostrum.

**COTTON CULTURE.**—A large amount of seed is being sent to this State from Tennessee, and our farmers would do well to give it a fair trial. In another part of the FARMER we give an article on its culture by J. H. Klippart, of Ohio. On well drained soils the ridging is unnecessary. We intend to plant one or two acres.

**PEAR TREES.**—We have just opened our invoice of Dwarf and standard pear trees from the nursery of A. Frost & Co., Rochester. They are first class two year old trees—varieties of our own, not the nursery selections—all fine, thrifty trees and in good order. There are certain varieties of the pear that have thus far done well on the prairies and we prefer to pay our extra pains for those rather than to run the gauntlet of those who have gone crazy on French pears. The Messrs. F. & Co., have brought down their list of pears to reasonable bounds, and have rejected nearly all the fancy sorts. Some twenty varieties will fill our bill at present.

**A NEW SEED STORE.**—Albert H. Harvey, for a long time in the well known seed store of Harvey & Co., Boston, has located a seed store in Chicago. Not having visited it in person, we can say little of its prospects. We have sent a couple of small orders by way of trial, and are well pleased with their prompt execution. From what we hear of Mr. H., he knows how to keep a seed store. The name has been so long and favorably known, in this line, that with ordinary tact, Mr. H. will be able to secure a large share of trade. We had about given up all hopes of enterprise in this department in the little village of Chicago, but this looks a little as though we were for once mistaken, yet our caution has become so chronic that we shall be cautious even under the auspices of a well established name, we shall therefore take Mr. H. on trial and give him a chance to coin a good name for himself, among his new patrons. Bad seeds are not disposed of when you have lost your money, as three to five times their value is lost in labor, and the season is past to recover from the loss. When a seedman is too poor or penurious to go into the market to purchase the best of seed, he will please excuse us from sending our orders to him. The selling of fresh grown seeds will always please the planters and make the dealer sleep all the sounder of nights.

**FRUIT FARM OF KIDDER & KUNG.**—Our readers are aware that this farm is located at Evanston, north of Chicago, and is the largest for the culture of small fruits in the State. We have just received a package of plants from this establishment which came in fine order. They sell plants of all the small fruits as well as grow the fruit. Planters of small fruits would do well to send for their catalogue.

HORTICULTURIST for April is at hand, and a valuable number. The series of articles on grape culture are worth more than the cost of the work. Club with the FARMER at \$2.50 or send \$2.00 to Mead & Woodward, N. Y.

GARDNERS' MONTHLY, for April, contains a large amount of valuable information on plain and ornamental gardening. Club with the FARMER at \$1.50 or send \$1.00 to W. G. P. Brinklar, Philadelphia, Pa.

THE Illinois State Fair for 1862, will be held at Peoria, commencing on Monday, September 29, and continuing six days. A trial of reapers and mowers will be held during the summer at Dixon, Ill. The time and programme will be published soon.

SORGHUM REFINERY AT DAVENPORT, IOWA.—The *Gazette* says that M. D. L. Dutcher commenced, a few days since, to hauling stone preparatory to erecting a building for the purpose of a refinery for sorghum syrup. He has located it on the river some five or six miles below Davenport. We understand that a party has it in contemplation to erect a similar establishment within the city limits. It will require several small establishments to refine all the crude sirup that would seek this point, if it were known that the proper facilities were here afforded for that purpose.

BURMUDA SWEET POTATOES.—We have received with our usual invoice of sweet potatoes, from J. W. Tenbrook, a half bushel of this new potatoe, that the sweet potatoe men are blowing over at present. The Nansemond has become so common that the dealers received something new to speculate upon, and they are trying the Bermuda. We have little faith in it for this climate—that is, we do not think it will prove more valuable than the Nansemond, which is hardy, early, very rich, and can be used at any stage of its growth. We are willing to give the new sort a fair trial and if successful will charge nothing for one notice, while on the other hand will be after it with sharp sticks. Our motto is try all things, that you think are good, and hold on to the best.

The head learns new things, but the heart forever practices old experiences.

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### Publishers' Special Notices.

**AGENTS**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.

**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.

**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.

**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors

may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin now, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

**CLUBS** may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

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**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign. tf





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nov 1862

## PROSPECTUS FOR THE JOURNAL OF THE Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

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All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

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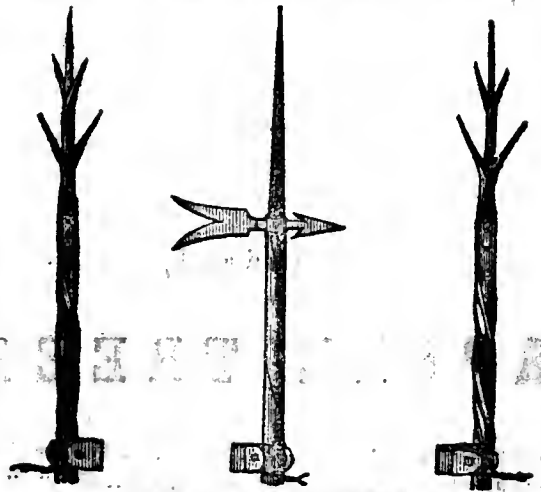
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, JUNE 1862.

NO. 6

## June.

On many accounts June is one of the most interesting months of the year. The forest has put on her full livery, and it is pleasant to walk through her long aisles of deep shade, festooned with climbers and redolent with sylvan flora, you tread on the dry leaves and the echo comes back from yonder ridge, you linger by the brooklet that whispers through the ravine and steals beneath the glossy drapery that would hide it from the sun. Not when autumn showers down the ripened nut-brown fruit, and while the thousand hued leaves fall into wintry windrows, is the forest so attractive, so contemplative, so full of beauty as when full robed in her wedding attire for June.

It is June that offers up the first fruits of the season—the acid berries, so acceptable to the invalid scorched with fever, and this year doubly valuable to the wounded soldier, be he patriot or rebel, and they also doubly arm the farmer for his labor. Roses, phloxes, and the whole family of summer flora are presenting daily boquets to feast the eye. But amid the beauties of the opening summer, with a commingling of fruit and flower of waving grass and tillering grain, the farmer must pour out his sweat like rain from

“Morn to dewy eve.”

He must ply his task; the garden, the orchard, and the farm crops all need his kindly care. His is certainly a pleasant task if he but will it, for his labors are among the useful and the beautiful. His is almost a creation, for when he waters the plants with his sweat, where falls the dust

from his feet in frequent visits to his trees, it is there that the unseen hand follows and presses a more vigorous growth. Our sympathies go up for our brothers of the press, who sit and write in second and third stories where the glorious sun shines in, but once a day, and shut out by high brick walls the remainder of the time, breathe air laden with coal smoke, and the odor from thousands of kitchens, instead of the pure air of the country. The blossoming of the peach, the apple, the cherry, or the pear, is nought to them but in the recollection of their boyhood; the swelling of the embryo fruit that May has turned over to the care of June, and on which the sun is beginning to paint its colors more beautiful than any effort of man's art, is a sight that never tires. The unfolding of these gifts of nature, as day after day they progress to maturity, is a feast of the eye only second to that of their ripened rinds presented to the taste. The feast of strawberries all smothered in cream is at hand, the cherries begin to redden, while the gooseberry and currant are taking the place of rhubarb, that has for the past six weeks supplied us with pies and tarts; the apple is putting on its orb-like form, while the spring grain is waving its sea of verdure over the prairie swells, and the corn is marching its long rows over the wide fields. Most assuredly June is invested with many, very many beauties.

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—An old lady had fallen into a well, and was rescued from drowning with some difficulty. She declared that “had it not been for Providence and another man, she never would have been got out alive.”

### A Western Fruit Book.

For the past three or four years western fruit growers have been promised a new work on fruits, and at this time the prospect looks less auspicious than ever. Some years since, one of our Illinois Pomologists commenced gathering the material for a work, more or less especially adapted to our local wants, but the more he studied into the subject matter before him, the more the task loomed up in giant proportions, and at last the idea has apparently been abandoned. Another whose name is intimately connected with Western horticulture, is still busy, or was, within a short time, gathering the raw material for a work embracing the pomology of the valleys of the Ohio and Mississippi. But why wait year after year for an elaborate work, when half of its value will be lost? Fruit growing is making rapid progress, and the planter wants to know what will best answer the purpose, he cares not about a thousand kinds that are supposed to be valuable; but he wants to know what particular varieties will suit his location.

In Downing's Fruits, we have an extensive catalogue of fruits, and for this purpose the work will always be valuable, so long as fruit growing and the printer's art are veritable realities, but in addition to this, fruit planters of the West need a yearly handbook of fruits. This work need not describe more than a couple of hundred varieties, including the whole family, but each variety should be accurately figured and described, so that the tree and fruit could be at once recognized, its history, value and adaptation to soils and climate, where it is the most hardy, productive and profitable, with the local names under which it is known. If it require twenty pages to do this, no matter; it is the history, character and value of the fruit that we want, not a catalogue. Let him begin with what is well known, say the Red June, give us its outlines, form and habit of tree, growth, time of coming into bearing, the opinion of those who have tried

it in all parts of the State or district, where it is valuable for market, with the markets for it, its relative value compared with other varieties maturing at the same season, and so on through the lists of Pears, Peaches, etc. A work of this kind that will cost a dollar, and of which a yearly volume is forthcoming, is just the thing we want; subsequent volumes can of course correct the errors of the first. If we cannot have this, let us have a monthly, devoted to fruit growing alone. Who will do the west yeoman service in this direction? The war is swallowing up all interest in agriculture, but not so in fruit growing, for the last spring has been a busy one to the tree planter, and for about the first time, brains, trees and muscle have been used, regard has been had to variety, form of tree, quality, preparation of soil, and what is of immense importance, shelter.

### Low Headed Trees and Shelter.

During the last year we have brought to the attention of tree planters numerous facts in regard to the value of low headed trees and shelter. In our own grounds the past spring we have added to the apple orchard nearly a thousand trees, and when the heads did not branch within a few inches of the ground we cut them off entirely, and they have thrown out vigorous shoots from the stumps thus rendered headless, but not to remain so for any great length of time, as they will soon have heads of the most approved form and vigor. In an orchard of five hundred May Cherry, (Kentish of Downing,) the heads are within two feet of the ground. Standard Pears are cut back in the same way. In all cases of tree planting we add shelter at once, and in the last trees set, used cuttings of cottonwood. We invite orchardists to visit our grounds, where they will see trees treated as above, and also in the Shanghi style, for we have hundreds of trees in our grounds of which we are not proud and occasionally threaten



them with the axe, to be replaced with a more comly style. We do not claim to be perfect, but do claim that we are not like a mule, always of the same stubborn way, but susceptible of yet learning something to our advantage.

For a young orchard, we claim to have a pretty good one, at least it pleases us at this time, as it is set well in fruit, and gives promise of substantial returns; but had we planted low headed trees at the same time it would have been worth more than double its present value. We have no doubt of complete success in orcharding on the prairies with the use of our timber belts. With Cottonwood, Tree Willow and Silver Leaf Maple, we can, in a few years make an effective screen for orchard and farm crops.

### Evergreen Trees.

MR. EDITOR:—It has often been remarked in my hearing that even a few evergreen trees planted on a pleasure ground or front lawn, impart a greater degree of successful improvement than treble the quantity of deciduous trees. I suppose the reason arises from the circumstance that we have very few native evergreen forests; consequently the presence of them indicates that they have been selected, and placed there from design, and not sprung up naturally. Few persons are aware of the warmth and shelter given by a good evergreen tree, and a thickly planted mass will very materially change the climate, if they are placed on the most exposed and bleak quarters.

There is a prevailing opinion that evergreens are more difficult to cultivate than deciduous trees: there is no reason for this opinion that I am aware of, unless it may arise from disappointments in transplanting at improper seasons, and setting out large trees that have had their roots mutilated and dried up before planting.—The only hope for the life of a tree, when treated in that manner, is to prune the branches very severely, I have seen them pruned so close that they resembled *fishing poles*, and, after two years, make thick-set, fine umbrageous trees.—The spring is by far the best time to plant them, and if it can be so regulated, the most certain of all times is just as they commence to push into growth; moved with even ordinary care, few will fail to grow, and, if pruned according to the quantity of roots left on them, failures need not occur. No rule can be given in pruning, as each tree may be differently circumstanced in this respect; but it is safe to err on the side of reducing the branches well at removal.

Evergreens are most abundant in moist climates, and many kinds that are perfectly hardy

in more Northern latitudes in the old world will not stand our clear, dry spring weather. We have a great variety, however, that have proved able to withstand the climate here—a few of which I will mention:

1. **HEMLOCK SPRUCE.**—I place this first on the list, because I think it the most beautiful of all evergreen trees. There is a peculiar gracefulness in its wavy branches that commands attention; and, as it suffers no injury from clipping or pruning, it may be kept down to any size or shape, and is thus also admirably adapted to ornamental hedges, and is often used for such with the best results. Notwithstanding its being a native here, and even farther North, it likes shelter as well as shade; the harsh March and April winds are apt to scorch the hemlock trees when they are fully exposed. It is well, therefore, to place them in the front of groupes of more robust evergreens; and their grace and beauty peculiarly adapt them for finishing plantations, or forming evergreen masses of shrubbery, or sheltering thickets.

(On the prairie we have been unable to grow the hemlock, unless shaded and protected by other trees, it is therefore scarcely worth the trouble to plant it in this part of the state.

ED. ILLS. FARMER.

2. **NORWAY FIR.**—This is, without any *if* or *but*, the most useful evergreen we possess. It is perfectly reliable in all locations, and will exist in all locations, and in almost any kind of soil, but luxuriates, like most of its class, in a rich, clayey loam. Hedges of the Norway are now very common, and no kind of hedge can compare with it in beauty or efficiency. Single specimens in good soil speedily attain a good size, growing about three feet annually. Many of them have a drooping habit; this habit, however does not obtain until the tree is twenty-five or thirty feet high, and is not observed when the tree is small. After severe frosty winds in March, the Norway will sometimes indicate that it has suffered, by a premature falling of the foliage, but it is not only on the most bleak exposures that such injury will be experienced.—It is one of the easiest trees to remove, and will exist under treatment that might well be considered barbarous.

3. **WHITE PINE.**—This a noble, and one of the tallest of American trees. (Of course, the great **WASHINGTONIA** is not included in this comparison.) Its admission in pleasure grounds must be duly considered, as it is too large, and its branches too wide-spreading, for small grounds, or placing very near buildings. In large laws it forms a fine feature, and can be rendered of great utility by an intelligent planter. Its silvery, delicate foliage forms a pleasing variety with the more sombre Norway Fir, and other Pines. It suffers more from transplanting than the Norway Fir, and should be well pruned back when removed. I have seen trees of this species trimmed to a bare pole, become handsome plants in a few years. On dry gravelly banks the White Pine progresses slowly, although they can be made to grow even on a shallow soil by an annual top-dressing of manure over the roots.



4. **BALSAM FIR.**—I bring in this plant because it has, and still is, largely cultivated and planted. For single specimens, they do not form fine objects a ter twelve years' growth, and, in the profusion of more beautiful and equally available evergreens, should not be planted on small lawns; but it possesses a degree of deep color in its foliage which renders it indispensable in the formation of groups in the better class of landscape gardening. A group of ten or twelve Balsam Firs, closely planted and surrounded with a border of Hemlocks forms a fine feature in a pleasure garden. But it is not recommended as a tree to be planted in limited grounds.

5. **SCOTCH FIR.**—I can recollect that some fifteen years a plant of this Fir was quite a rarity; now one meets it everywhere. When young it is, like most all Pines, a very pretty, compact-growing plant; as it attains age it loses this compact habit, and inclines to be thin and straggling in its growth. A group of five or seven planted closely together form an agreeable contrast, its light green color being conspicuous in winter senery.

6. **AUSTRIAN PINE.**—This rigid-looking Pine is found to stand the climate well. It is not a tree for small lawns, as it is completely destitute of grace, and requires considerable space to develop in perfection. It should always be removed when small; a plant two feet in height is quite as large as should be transplanted, as it forms long wiry roots, which are difficult to remove without injury. When young it assumes a very bushy form, the lower branches being more fully developed than the Scotch Fir, which it in some measure resembles; but whether it will retain this desirable quality, or lose its lower limbs as it attains in height, I have no means ascertaining.

7. **ARBORVITÆ.**—The American Arborvitæ is most common, and makes the best of all hedges. The Siberian is more compact, and of a bluish-green color. The Golden is a poor affair—nothing golden about it, except the golden price that is usually asked for it. It has the demerit of losing its lower branches, and becoming destitute of its foliage, except on the points of the shoots. When about two or three feet high it is very neat—but there its beauty ends.

These embrace the most desirable of our hardy evergreens. There are others of more or less merit, which may form another paper.—*Farmer and Gardener.*

### Low Headed Fruit Trees:

In trimming fruit trees we should always be careful to secure the trunk from the rays of the summer sun. Solar heat, by being long permitted to come in contact with the bark, is said to scald the circulating fluids, and thus cause many of the diseases which affect fruit trees in this climate. The foliage only should be fully exposed to the influences of heat, for that is capable of bearing it unharmed, and even to profit by it, when most intense. It has been asserted by distinguished terraculturists that trees which

are permitted to branch out low—say three or four feet from the ground—are rarely attacked by "fire-blight," "frozen sap blight," black spots or other diseases of the bark or limbs.

There is, also, another advantage attending this practice. The soil is kept lighter, looser, and more free from weeds, and there is no necessity of mulching. The high winds pass, also, almost harmless over the trees, and have no power to twist, rack, and break the branches, or to detach the fruit, as they do when the branches aspire and are exposed. A writer on this subject says: "The trees will be much longer lived, more prolific, beautiful, and profitable. They are most easily rid of destructive insects, and fruit is much less damaged by falling, and the facilities for gathering it are much greater; there is less danger in climbing, and less danger in breaking the limbs. The trees require less pruning, scraping and washing, if the two latter are thought necessary; and the roots are protected from the scourge of the plow, which is too often allowed to tear and mutilate them."

The proper shape for fruit trees is that of an umbrella reversed. When this shape is communicated by pruning, the foliage is more freely exposed to the action of the solar rays, and to the air, which ought always to have a free circulation among the foliage and fruit. By communicating a conical form to any tree, although it may be rather more graceful and elegant in its effects upon the landscape, we certainly injure it in many ways, if looked upon it as an object of profit. The fruit of apple trees which grow on the interior limbs, where the surrounding foliage and branches prevent the sun's rays from penetrating, and where the direct influences of the heat are never felt, is, to a certain extent, insipid; it does not mature thoroughly, and will not keep so long or so perfectly as that which grows on the outside branches, exposed to the sun and wind. It also varies so much in shape, and especially in color, that we have known two plates of apples, selected from the same Baldwin tree, one of which was pronounced by a skilful fruit-grower to be the Baldwin, and the other plate another variety.—*N. E. Farmer.*

**WHY THAT ROSE BUSH FAILED.**—Roses to shade a window, are often planted under the dripping eaves of the farm house, where in the leached, gravelly trench they linger out a miserable existence, trying the patience of the wife who wonders over their slow growth for a few years, and finally abandons them to utter neglect, declaring that she never could have luck in raising roses, and it is no use to try it.

Planting them in the earth thrown up in digging a cellar is no better; roses require a rich deep soil; the surface around their roots should be kept free from sod, and annually supplied with chip manure or forest mold, or a weekly pail full of the drainage of the cow house, or of soap suds. Give your roses a little attention of this kind each spring and you will have no reason to complain of your luck.

From the Country Gentleman and Cultivator,

### Raising Lambs For Butchers.

After the ewes are well rested, and used to grass so that there is no danger of overeating, they may gradually be put on better pasture.—At this time an important point is to be aimed at, and kept steadily in view, viz: not to hurry your ewes too fast in the fall, so that the thrift cannot be kept up in the winter, but aim at a constant gain in condition, changing from worse to better, and not better to worse. Of course if your ewes are good milkers, as they begin to spring bag they will begin to get thin; but this thinness is perfectly natural, and does not interfere with the ewes being in good heart and very thrifty. About the 1st of Oct., I should say—others Nov. 1st, the ram should be turned in.

I have now to write on a delicate matter, but I shall state what I know to be so, and reserve the proof for the future, if it becomes necessary to produce it. In selecting your stock ram then, don't be too pinching, but buy a good one, as it will be money well laid out, and that you will never regret it; and by all means buy a South-Down. As I have watched this matter closely for fourteen years, I can say with confidence that no other breed is better or as good. But it does not follow that you need buy of me. There are many good South-Down flocks. I would be glad if there were ten times as many. I might mention Mr. Thorne's of New York State, Thomas Buffum of Newport, R. I., Mr. John Worth, Westchester, Chester Co., Pa., and very many others; but my readers will notice their advertisements.

When I first commenced with South downs, many of our old fashioned farmers would not pay ten dollars for a ram lamb. Since seeing the great advantage, these same farmers have willingly paid \$25 for ram lambs, only keeping from 20 to 50 ewes, and will any day tell you that they would not be without a South-Down ram for fifty dollars; but I have said, and say now, that from \$15 to \$25 is enough for a farmer to pay for a ram lamb just to raise butcher's lambs. Some conted that a Leicester, Cotswold or other long-wool, is as good, but a host of witnesses say they are not. A few years ago many of the Leicesters were scattered in this section, but after a fair trial, the South-Down proved so much better, that I do not know of a single Leicester left. Some of our farmers used both in one season, dividing the ewes equally.—The result was that the South-Down cross was fat and sold clean before a single Leicester cross was fit for market. The best of New-York butchers buy lambs in this section; they all say use by all means a full blooded South-Down ram. I may here stop to say that all black-faced sheep are not South-Downs, and that the improved South-Down is much better than the common.

Every thing working as it should, by the 1st of March your lambs will commence dropping. I should therefore commence about Feb. 1st, to give the ewes some grain, and gradually increase to half a pint apiece by March 1st—then by April 1st have it increased to one pint of corn

meal or one and a half pints oats. If the ground should be much bare, so that the ewes can get to the ground, they will not need roots before lambing, but if confined to yards on clover, hay and cornstalks, I should give about one pound turnips apiece per day, increasing to ten pounds when lambs are four weeks old; but if the ewes can run through April on good sod intended for plowing, they will not need so many roots.—Many of our best farmers never feed any roots, but they keep no more sheep than they can keep well; yet it is that this point that roots are of great service, as they help to keep the sheep off the grass intended for pasture until it gets well started, and that almost insures good pasture through the season.

When the lambs are three or four weeks old, they can be learned to eat cornmeal, by putting a little in the mouth, mixed with a little salt.—After learning a few to eat out of the hand, partition off a pen under shelter by themselves, putting a bottom and top railing across, then nailing pickets on just wide enough to exclude the ewes, and put a small trough within, placing in it some sweet cornmeal, *ground coarse*, and a little salt at first sprinkled on. Your lambs will soon find it out, and if you please to take time, you will find it an advantage to cut some turnips or potatoes up fine for them.

By now giving your ewes plenty to eat, and nursing your lambs, they should be fit for market in June, and the ewes in September worth \$1 more than cost, which, with lambs and wool, should pay full \$6 50 or \$7 per head for ewes wintered, especially if you raise many twins.

J. C. TAYLOR.

Holmdel, N. J.

USE OF SWEET APPLES.—A sweet apple, sound and fair, has a deal of sugar or saccharine in its composition. It is, therefore, nutritious; for sweet apples, raw, will fat cattle, horses, pigs, sheep and poultry. Cooked sweet apples will "fat" children, and make grown people fleshy—"fat" not being a polite word as applied to grown persons. Children being more of the animal than "grown folks," we are not so fastidious in their classification. But to the matter in question. In every good farmer's house who has an orchard, baked sweet apples are an "institution" in their season. Everybody, from the toddling baby holding up by its father's knee—children are decidedly a household commodity—away back to "our reverend grandmother" in her rocking chair, loves them. No sweetmeat smothered in sugar is half so good; no aroma of dissolved confectionery is half so simple as the soft, pulpy flesh of a well baked apple of the right kind. It is good in milk, with bread. It is good on your plate with breakfast, dinner or supper—we don't "take tea" at our house. It is good every way—"vehemently good"—as an enthusiastic friend of ours once said of tomatoes.—*N. Y. World.*

Gentlemen who smoke allege that it makes them calm and complacent. They tell us that the more they fume the less they fret.

**VARIETIES OF POTATOES.**—Mr. T. B. Milner, correspondent of the Country Gentlemen and Cultivator, in a late number of that paper makes the following statements in relation to potatoe culture in Oneida county, New-York:

The last season was very discouraging in potatoe culture in Oneida county. We had supposed that with Peach Blows, Prince Alberts, Davis' Seedling, &c., we were secure against blight; but we were deceived. The dry rot has been more injurious than usual, and potatoes that were considered good when put into the cellar, have turned out badly defective.

I have grown extensively, Peach Blows, Davis' Seedling, Prince Alberts, Jenny Linds and Garnet Chili.

Peach Blows are too late for our climate, and do not grow as large, and are not so good as grown in New Jersey.

Davis' S edling, which promised to be exempt from disease in 1859 and 1860, is badly effected with dry rot.

Prince Alberts rot but very litte, but there are so many small potatoes among them, that they are objectionable on that account; otherwise they are a valuable variety. They do best on a very rich soil.

Jenny Linds or California potatoes, rotted badly in this section. If they can be produced in a sound state, they are a good crop to grow for feeding to cattle and hogs.

The Garnet Chili is at present the least liable to disease of any kind known in this section.—The yield is very large, with few small potatoes, and requires no assorting to barrel for market. Indeed, so excellent is the quality and yield, and so free from disease, that they have created a "sensation" among potatoe growers in Central New-York. I recommend that we call this variety simply the Garnet; long names are decidedly objectionable, and if Mr. Goodrich does not improve in names, the public will name his seedlings for him.

**TROTTING HORSES TOO YOUNG.**—It has long been our opinion, says the Wisconsin Farmer, that horsemen are too much given to putting their promising colts to their speed at too early an age. We have in our memory, a number of splendid young horses, which, as we think, were just about ruined by such blunders of their owners.

There can be no objection to commencing the process of training at quite an early age. Indeed the work of education should begin, while yet they are sucking colts. But as the development, strength, and power of endurance come on gradually, rarely attaining their maximum until the horse arrives at the age of six or seven, or even eight years, it would seem to be the teaching of philosophy and common sense, that the severe trials of speed and power should not be imposed until the period of maturity. And yet nothing is more common, at most of our State and County Fairs, than to see young colts of hardly three or four years put upon the trotting course, whipped through to the very verge of their endurance. In our way of thinking, such practices are not only unwise, but barbarous and inhuman.

**CORN IN MASSACHUSETTS.**—MESSRS EDITORS:—I saw a statement in your Country Gent. of April 17, referring to the cost of raising corn in New York, and now I wish to show the cost of raising corn upon the hills of Western Massachusetts. The piece which I refer to, consisted of three acres, which had been mowed for three years previous. It required one yoke of oxen and a man and boy to plow it:

To 3 days work plowing and spreading manure,.....	\$7 50
3 day's drawing manure.....	3 50
Harrowing.....	2 00
Half days plastering with machine.....	1 00
Three pecks seed corn.....	75
Interest on land at \$30.....	6 30
Cultivating one way three times.....	1 75
Eight day's work hoeing.....	5 00
Two day's work cutting.....	1 50
Husking and drawing in corn and fodder.	8 00
Thirty loads of manure.....	15 00
Total cost.....	\$52 30
Corn Fodder.....	15 00
	<hr/> \$37 30

One hundred and sixty bushels of shelled corn at a cost of about 23 cents per bushel, showing that corn can be raised to some advantage upon the rocks of Western Massachusetts.

H. H. P.

*Shelburne, Mass.*

**RAISING AND KEEPING CELERY**—P. Henderson, of Jersey City, who raises celery largely for market adopts the following mode, dispensing with the hot-bed. "The seed is thinly sowed early in spring, on a very rich, mellow and perfect piece of land—they are well cultivated and afford fine healthy plants by the first of July.—They are always transplanted in rain, to rich land. Those intended for autumn use (blanching on the ground,) are in rows four feet apart, (to allow banking up,) and five or six inches in the row—on the surface and not in trenches. For winter and spring use, the rows are three feet apart. They are well cultivated with a horse and by hoeing.

When about half grown, or about the end of summer, a little earth is drawn to them to give them an upright position. After that, the plants are held closely together with one hand, and additional earth applied. In a few weeks more, they are banked up by digging the earth between the rows.

That intended for winter use, is packed away in trenches about a month before winter sets in. For early winter, the plants are removed a week or two sooner, and without shaking the earth from the roots. For later use, they are taken up a little later, and packed more closely. The trenches are not over eight or ten inches wide—if wider they promote fermentation and decay. After they are filled, the soil is pressed closely on each side, by thrusting a spade down, but leaving the green tops exposed. About the first of winter, the whole is covered with about six inches, (or more) of stable manure or leaves.

### Soil and Crops.

The April number of the "Journal of Illinois State Agricultural Society" contains an essay on the Cultivation of Field Crops and Preparation of Soils, by J. B. Turner, of Jacksonville, Ills., which is a very able, instructive and interesting document, that we would like to give entire to our readers, but its length forbids. Mr. Turner very forcibly illustrates the value of frequent stirring of the soil, more especially after a heavy rain. The crust of which he speaks, after having been once broken, will not form again during the longest periods of drouth, or until another shower shall make a thin putty of the surface clay for the glazing. We ask not only an attentive perusal of this article, but its careful study. The State Agricultural Society is doing good work in the publishing of these valuable essays.

Ed.

First, the upper surface may be too smooth or too rough. Where ground has been suffered to lie too long, especially after a heavy rain, in clay soils like those in the West, the surface becomes glazed or crusted over with a sort of smooth glossy crust, of a considerably lighter color than the same soil is when not so glazed, and sometimes almost of a pale grayish white, even in soils generally quite dark.

Now, the crusting over of the soil, as all well know, interferes at once with the processes of successful growth, but the reason why it does is not generally considered.

But we shall find that it lies in three most vital points: every one of which tends directly and seriously to retard all vegetable growth, especially of such plants as corn, and others requiring great heat in the soil.

1. In the first place, this glazed surface being of higher color, has far less power on that account of absorbing the rays of the sun than it would otherwise have, while the glassy surface constantly, from its smoothness, reflects back the rays like a mirror, and from these combined causes a vast amount of the first element of rapid growth, namely, heat, is daily and hourly dissipated, or thrown back into the air and wasted, instead of being absorbed in the soil.

2. In the second place, this smooth surface excludes the free access of the air to the interior of the soil, into which it would, from the undulatory or vibratory motion (which I have described,) otherwise penetrate, and (by making a constant deposit of dew among its loose particles, both by night and by day, together with the ammonia and carbon, or whatever else it contributes to vegetation,) thus perform its proper functions towards growth, all of which by this little crust are more or less interrupted.

3. But by thus shutting out the free access of both heat and air from above, the corresponding interplay of capillary attraction from below is also interrupted; just as when the lamp wick becomes glazed over, the lamp not only ceases to

burn brightly above, but the oil, in like manner also ceases to respond, and to run up from below, so that by this simple glazing the plant becomes robbed of every one of its elements of life, namely, the heat of the sun, and the capillary attraction which supplies, when needed, its moisture and all other needed elements from below: the mischief is, therefore, vital at every point, and its real effects any one can see by simply keeping this crust broken every day with a hoe, on one row of cabbages or other plants in a garden, and allowing another to stand glazed over week after week.

For the same reason it is injurious to ground to lie in the sun thus glazed over, whether there is any crop on it or not—that is it will grow no better; it gains nothing, or but little, either from above or below, whereas, if the surface was roughened with a harrow, or even covered with boards or with weeds, alive or dead, so that it need not crust over, it would be constantly enriching itself, both from what it received from the air above and from the subsoil below. Hence when a long drought succeeds a heavy rain, naked fallow plowing may do more hurt than good: that is, the soil may not gain as much, either from above or below, when so crusted over, as it would have done if it had been let alone, and not fallow plowed at all. The proper remedy, of course, in all such cases alike, is simply to break up this crust, as often as it appears, either with a hoe, or harrow, or cultivator, or whatever is convenient. In other words, if your agricultural lamp-wick gets glazed over, the only thing is to snuff it—with your fingers, or whatever you can get hold of—for it cannot burn clear again till you do: unless, indeed, Providence should see fit to undertake your own proper work for you, and send along a thunder storm, to snuff it out for you, which He will not always do in season, for it is not His business to snuff your candles, or hoe your cabbages for you, though He may possibly do it. Better do it yourself. Attend to your business, and He will attend to his first rate—be assured of that; and on ground liable to crust or glaze over, it is your business to plow and stir often, even though it may not be very deep, and some seasons much oftener than others; and the man who has concluded to cultivate just so many times every year and no more, let the weather be what it will, ought also to conclude to wear just so many jackets every day, summer and winter.

4. But, on the opposite extreme, the upper surface may be too rough. In this case there is the same or even a greater loss of heat, especially in the spring, than before while all the other processes are interrupted from an opposite cause. The sun's rays are caught in great clods by day and blown away by night, while the interior heat of the earth is fearfully wasted by the more rapid radiation from the rough uneven surfaces. All are aware how the light snow will melt sometimes from a smooth or rolled field in a single day, while it remains for weeks on an adjacent uneven or cloddy field. This shows us how much heat is wasted by leaving the field rough and full of clods, in the spring months,



which would otherwise be absorbed into the soil and laid up to push the young corn into an early maturity of growth. For the best manure heap any corn raiser has is the sun, the next best the air with its gases, and the rest he may find in his farm-yard, or wherever he pleases; but if he so cultivates as to constantly waste the power of the sun and the air, he cannot raise a first rate crop of corn, manure it as he will. Since our spring climate usually has too little heat for corn and too much for wheat, we should keep corn surfaces smooth, so as to save as much heat as possible, and wheat surfaces rough or ridged, so as to avoid it as much as possible. So, in all cases, we save heat by smooth surfaces, if they are not glazed or glassy—and dissipate it rapidly by rough ones: both that which comes from the sun above and from the center of the earth below. Water also stands and lodges upon rough, cloddy surfaces, and thus again dissipates, in its evaporation, an immense amount of this vital element of the corn crop, for it wastes the same amount of heat to boil away or evaporate a quart of water in the field that it does in a kettle over the fire. Such rough surfaces also retard the deposit of moisture and gases from the air above, and to the same extent interfere with the capillary attraction from below, as too much frizzling the top of the lamp-wick arrests all its proper modes of burning. The free and proper access of the air to the soil below is everywhere interrupted by dry clods and inequalities, which it cannot penetrate, or if so only to have its deposits blown away again by the winds; and, while the natural action is thus interfered with at the surface, that from below must be correspondingly impeded, and the whole process, either of recuperation or growth, in like manner retarded.

**PACKING FRUITS FOR LONG DISTANCES.**—I may here state that I have found no better method in all my experience, which extends over a period of twenty years, with all kinds of fruits, varying in distance from fifty to five hundred miles. It simply is: box, soft paper, and sweet bran. A box is chosen in size according to the quantity to be sent. A layer of bran is put on the bottom, then each bunch of grapes is held by the hand over a sheet of paper; the four corners of the paper are brought up to the stalk and nicely secured; then laid on its side in the box, and so on until the first layer is finished. Then, fill the whole over with bran, and give the box a gentle shake as you proceed. Begin the second layer as the first, and so on until the box is completed. Thus with neat hands the bloom is preserved, and may be sent to any distance; but with clumsy hands, quite the contrary, and often an entire failure, as the putting and taking out of the box are the most important points to be observed. I have invariably packed sixty or eighty bunches of grapes and fifty or sixty dozens of peaches or apricots in one box, and received letters from employers who say they had arrived as safe as if they had been taken from the trees that morning — *Cottage Gardener*.

**PLANTING CABBAGES.**—A correspondent of the *Mark Lane Express*, who highly extols the cabbage for feeding milch cows, store cattle, sheep and swine, and more especially for spring-feeding of lambing ewes, says that the average product per acre in England may be stated at 25 tons. He gives the following directions for planting them:

The cabbage plants freshly drawn from the nursery-bed, with the extreme end of the slender fibrous root cut off, are brought to the field and immersed in tubs of water, with the roots downwards, and taken from the vessels as the plants on the top of the drills, at the distance of two feet from each other, making a hole with the dibble for the insertion of the plant to the depth it has stood in the nursery bed, and pushing with the dibble the sides of the hole together, in order to give the plant a firm position. It must be very carefully observed not to insert the plants deeper or more shallow than they stood in the nursery bed, as a transformation of the exposed or earthed up skin is the consequence, and a necessary delay in the onward progress of the plant. All plants with a large foliage require much moisture, and the dung that is used for cabbage must be thoroughly moist, and even wet, whether it be cool or fermented, the plants immersed in water, and the insertion in the ground should be performed in the wettest weather in which the work is possible to be done. When any plants are seen to be dead, the places must be immediately filled with fresh plants in order to ensure a full crop all over the field.

**A GOOD FARM FENCE.**—Mr. D. Davis, writing to the *Co. Gent*, recommends good straight rails from fifteen to twenty feet long, and posts from six to six and a half feet long, and five to seven inches in diameter. Chestnut is good. After you have heaped up a heap of brush to burn, put the ends of the posts you are going to set in the ground, on the heap, and then set the bushes on fire, and char the ends of the posts, which will prevent them from rotting so soon, taking care not to burn them too much. Then dig the holes from two to two and a half feet deep, and set the posts and wedge them firmly in with stones and dirt. The rails of a panel should be of equal length. Then have one man take hold of each end of a rail, and spike it to the post; four rails high is enough.

Three men could build a fence very fast—one to dig the holes, the other two to build the fence. A fence built in this way is very strong—the rails not liable to be thrown by unruly cattle, takes up very little room, and needs no braces—plow close up to each side if you wish, and a very good fence to look at.

Instead of having bars at the entrance of your fields, make a gate in this way: Take two pieces of joists four inches square, and as high as you



wish for the end posts. Then take five strips of inch board for the slats, the lower one being the widest, the next a little narrower, and so on, the top one being the narrowest. Then mortice holes in the end posts, and insert the slats and pin them. Take two strips for braces, one on each side. Fasten one end of the brace near the heel of the end post on which the gate is going to swing, and the other end near the top of the opposite post, and nail them to the slats.

**RASPBERRIES.**—The cultivation of this wholesome, juicy, and delicious summer fruit, is not receiving from our rural population that attention which its good qualities, varied uses, and ready sale demands.

Had the public taste set itself to the improvement of our native sorts, instead of foreign varieties, we should now be able to name a list of hardy American varieties, which would stand unprotected, our climate of cold winters; but, unfortunately for us, until within the past few years, American Horticulturists have contented themselves with culture of foreign varieties, although we have members of the same genus in no small variety, standing in our fence corners and waste places; as if to challenge our skill in the production of other varieties from seed of their hardy stock; known, as they are, to possess a sportive disposition.

The Ohio Everbearing, and Catawissa, are believed to be seedlings from the American Black, or Black Cap.

The raspberry relishes a deep, warm, sandy loam, but will not refuse to grow in any permeable, deep worked soil, if dry.

The roots of the raspberry ramble in search of their food near the surface, and are consequently quickly affected by drying sunshine on a naked surface, it is for the mulching and not the shade which which places them on such good terms with surrounding trees and shrubs. Give them three inches of leaf or straw mulching in the open garden, and they will demonstrate their preference for the latter position, by an increased quality and quantity of their refreshing berries. —*Iowa Homestead.*

**KINDNESS TO MILCH COWS.**—One of the greatest errors in overcoming cows that are unquiet while being milked, is to whip, beat, kick, and bawl at them. This generally done, and the cow becomes afraid and angry, and instead of becoming better, grows worse. Milch cows cannot be whipped or terrified into standing quietly, gently and patiently during milking. They dislike to be milked, for they know that words and hard blows always attend the operation. They dread to see the milker, as the little urchin dreads to see the birchen rod in the hand of an angry pedagogue, when he expects to have it applied to his back. A cow, kindly and properly treated, is pleased to see the milker, gladly awaits his or her approach, and submits with pleasure to the operation of being milked. Every one having experience with cows knows this to be true. But the cow is opposed to a change of milkers; she soon be-

comes attached to one person who performs the operation, and does not willingly and freely give down her milk to another person; therefore, have one milker to certain cows, and bear in mind, if you change milkers, it is at the expense of a loss of milk, and of injury to the cow. All animals appreciate kind treatment, and resent abuse. See that those who milk them can control themselves, govern their passions, speak low and kindly under almost any provocation, and soon the cows will learn that they are not going to be abused, and will submit to the operation. Milking should be performed at regular hours, not varying fifteen minutes one day from the other. No talking nor laughing should be permitted. —*Ohio Farmer.*

**POST AND RAIL FENCE.**—We are interested in fencing, and read with interest many good plans and suggestions in the *Farmer*. I will give you my plan for making a cheap fence, and which answers a very good purpose for new beginners. After splitting the posts seven feet long and pointing one end, I lay them along the line where they are to be driven; I then take my oxen and wagon and straddle the line of the fence. I have a boy or man to raise the post and hold it, while I stand on the wagon and drive it down two and a half feet—leaving four and a half feet above ground. The team is then started on to where the next post is to be driven, and so on. In this manner an able bodied man can drive two hundred posts in a day. I then take poplar poles (of course any other kind of poles may be used) four, five, or six inches in diameter and sixteen feet long, split them in two and nail on. Three of these rails well nailed on, make a very good fence.—The posts should stand eight feet apart.—*Ex.*

**USEFULNESS OF TOADS IN GARDENS.**—At a recent meeting of the Brooklyn Horticultural Society, the subject of toads in gardens was under discussion, when Mr. Burgess, an "old country gardener of long experience," stated "that thirty years observation had convinced him that it was the snail and not the toad which devoured strawberries and their vines. Most people attributed the destruction to toads, but he was certain that they were harmless. In gardens he considered them of great use, and all gardeners should look upon them as their best friends. Mr. Fuller endorsed all that had been said upon the subject, and he was glad to hear it. He believed the toad a most valuable auxiliary to the gardener. They were worth \$500 a piece, as they keep the ground clear of insects entirely. Besides they can be domesticated! This was not generally known; nevertheless it was true. Those in his garden knew him, and would follow in order to get the insects, caterpillars, etc. Their preservation ought to be attended to. Mr Burgess was of the opinion that there should be a fine for killing them."

(For the Illinois Farmer.)

**Remedy. Peach Grub and Apple Borer.**

ED. FARMER: I would inform your readers once more of the benefits which I have derived from the application of "gas-tar" to apple and peach trees. For the last four years I have found it a sure preventive against the ravages of the "borer." For fear some might mistake pine tar for "gas tar," (or in other words coal tar) I would inform them that pine tar would injure the trees, whereas the gas tar seems rather to assist than to retard the growth of trees. If any one doubts my statement, it will be a very easy matter, for any of them to come and examine over three hundred of my trees and see for themselves. The use of "gas tar" on my trees was at first an experiment with me, but the use of it on my trees for four years in succession has removed all doubts in regard to its efficacy. It should be applied to the trees yearly about the tenth of June, so as to prevent the borers from depositing their eggs in the bark of the tree which is done in the months of June, July and August. The eggs soon hatch into worms and commences their work of destruction. The application of "gas tar" to apple and peach trees will not prevent the borer from doing its work, if it has been deposited in the bark of the tree before the tar was applied, but it will prevent any more from being deposited in those trees to which it is applied. The knife should be applied to every tree that has the borer in it, and they should all be thoroughly extracted. But if any should be left in the tree they will only remain there to destroy the tree until they come to a certain stage of maturity, which will be about one year from the time they first hatch into a worm on the peach, and about three years on the apple. They will then be transformed into a bug about half an inch in length with wings. They will eat a hole straight out through the wood and bark about the size of a small pipe stem through which they pass and fly away. They never return again only to deposit more eggs in some other part of the tree. The borer sometimes attacks the forks of trees, therefore the tar should be applied to those parts.

I have been thus explicit in giving a description of the apple tree borer and peach grub for the benefit of those who have not studied much on the subject. "Gas tar" can be purchased at the gas works for ten cents per gallon, which makes it a very cheap article. In putting it on to trees it need's only to be thoroughly done with a common painter's brush a strip entirely around

each tree about two or three inches wide from the ground upwards. The ground close around each tree should be solidly packed so as not to let the tar run down and mix with the earth which will, by drying form, a kind of cement and prevent the borer from getting down between the tree and the earth. This last recommendation should be thoroughly attended to.

M. J. POND.

*Concord, Morgan Co., Ills., May 16.*

It is time that we give more attention to the grub and borers, for they are secretly at work on our trees, and before we are aware will do us no small amount of mischief. Low headed trees are less liable to their attacks than high ones, as they delight to lay their eggs in the sun scalded portions of the bark, as its slow growth and dormant condition pleases them better than the rapid growing bark that often holds them fast by its rapid growth. It is easy to try the "gas-tar" which can be had at any of our gas works.

ED.

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TEST YOUR SEEDS.—It will often save much vexatious loss and trouble in replanting, if the vitality of seeds was tested before sowing. This can easily be done by placing a few seeds on an inverted piece of sod and covering them with another piece of light sod, and keeping them moderately moist and warm for a short time. Count the seeds before you put them in, and you can thus ascertain what proportion will be likely to grow.

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CUT WORM AND CORN GRUB KILLER.—Dr. Asa Fitch, the eminent entomologist of the N. Y. State Agricultural Society, says:

"I doubt not you have noticed in plowed fields a large black beetle with most brilliant golden dots placed in rows on its back. It is the *Calosoma calidum* of entomologists, and its eggs produce the corn grub killer. It is a most inveterate foe of the cut worm, grasping the worm in its strong jaws, and in spite of its violent writhing and struggling securely holding it, and when it finds these worms in plenty, it gorges and surfeits itself upon them, till it is so glutted and distended as to be scarcely able to stir—for it never knows how to let a cut worm alone when it meets with one. It is continually hunting these worms, feeding on nothing else it can obtain them. Both it and the golden dotted beetle which produces it, therefore, should never be harmed."

[From Field Notes.]

## Sweet Potatoe Culture.

## PLANTING.

This may be done from the middle of May to the middle of June. In some seasons it may be commenced earlier than this; in some it may be continued later. Generally, the best time is, from the 10th or 15th of May, to about the same in June. It should not be done until the plants are out of reach of frosts, and the ground warm enough to promote immediate growth.

A peculiarity of the Nansemond variety is, its adaptation to a great variety of soils—even loamy clays, quite heavy with clay, if lying elevated, and manured. Not cold or wet grounds. Generally, high, sandy soils are most suitable. Almost any soil that will produce corn well, will produce this, except low alluvial grounds, where there is too much of vegetable mold, that causes excessive running to vines. New grounds produce this crop well, where there is not too much vegetable deposit, and moisture; not turf. Turf should first be subdued with another crop; corn or wheat is favorable.

Use animal, rather than vegetable, manure—that is, from the stable, rather than the straw stack. We have used ashes, applied as a top dressing, with very satisfactory results. Till deeply. All the better for sub-soiling. We have sub-soiled in years past, and are sure it pays.

Plow when the land is in good condition; no matter if a week or two, or more, before time for planting. At planting time, pulverize well; if necessary, with harrowing and rolling—or what is better, drag-crushing), and throw into high ridges by turning together two furrows with a two-horse plow making the ridges about three and a half feet from center to center. Set the plants separately, fifteen to eighteen inches apart in the ridge. We use a common mason's trowel in setting; thrusting the trowel somewhat obliquely, and as the trowel rises, the plant in the other hand takes its place. Have the roots wet, and press the earth well around them, if the ground is not too moist. Set the plants so that the stems of the lower leaves will be covered, and that they may sprout again if cut by worms or frost. If the plants are very long, they should be set more obliquely, so that the lower ends or roots will not be too far below the surface.

The ground should be moist, at least on top, when ridging is done; but should not be heavy or muddy. If the ground be quite dry when the planting need be done, the plants may be watered—putting them in otherwise, well pressed, leaving a cavity around the stem, into which pour about a pint, immediately. When the water has soaked into the earth, and the leaves become dry, pull some dirt into the cavity, thus preventing “baking” around the plant. When the soil is moist, planting may be done through the day, giving attention to their being well pressed around the roots. The plants will wilt some, but will revive at night and never wilt again. Those having but few, can set them in the afternoon or evening. The sweet potato will bear transplant-

ing, with less moisture of ground than most other plants require.

In field planting, a boy can drop plants, (carried with roots moistened in a basket or bucket) for two men to set—who, when accustomed to it, can plant an acre per day.

At the distances mentioned, an acre will contain about 10,000 plants.

The ground may be manured by making a furrow with the plow, and spreading manure along in it—over this, make the ridge; or spread the manure broadcast before ridging.

## CULTURE, ETC.

Commence tilling with an adjustable cultivator that can be adopted to the breadth between the ridges, and throw back the earth with a wide shovel plow, reforming the ridges—finishing with the hoe, particularly after the vines have commenced running, be careful not to strike into the ground near the stem, lest you cut off the best of the projecting tubers. Do not cut the vines nor cover with earth, but lay them on the ridges out of the way. If they have taken root, it will not harm to lift them—some think it beneficial. In wet seasons, and on grounds producing excessive growth of vines, as they took root from time to time, thus checking their growth, and assisting the tubers. Give them frequent hoeings, if possible—sufficient, at least, to keep the ground in good condition. Do not hoe down the ridges, but preserve them.

C. B. MURRAY.

From the Country Gentleman.

## Oiling Harness.

MESSRS EDITORS: Seeing J. L. R.'s communication in regard to oiling old harness, I will offer an improvement on his method of doing the job. It is as follows:

Take Castile soap and make a strong suds with warm water, and wash the harness with it thoroughly; then let it dry, and then oil it with good clean oil, and it will look equal to new. The soap is equal to one oiling, and it leaves the harness perfectly clean, and is much better than to use clean, warm water. I have used hen's oil with good success, and I think it better than neat's foot oil for the purpose. Will J. L. R. please to try this method, and report the result.

MASSACHUSETTS.

Carrying politeness to excess is said to be raising your hat to a young lady in the street and allowing a couple of dirty collars and a pair of socks to fall out upon the sidewalk.

Women can easily preserve their youth; for she who captivates the heart and understanding never grows old.

God pardons, like a mother who kisses the offense into everlasting forgiveness.

[From the Country Gentleman and Cultivator.]

### Top-Dressing Grass Lands.

Within a few years past the subject of top-dressing grass lands has been much discussed, and carefully conducted experiments have been instituted and carried through, both in England and in this country, for the purpose of testing the economy of this method of applying manure. Different fertilizers, organic and inorganic, have been carefully noted, and many of them have been made public through the columns of the agricultural journals.

Recently we have been looking over a portion of these reports, and in this article propose to notice some of the experiments for the benefit of such of our readers as have not had access to the several journals from which we quote.

Of the importance of the hay crop to the farming interests of the northern portion of our country we scarcely need allude. Where so much of the thrift and welfare of our farmers is dependant upon their herds and flocks, and the manure derived from them, we think it is not overstating, when we say the hay crop is the foundation of successful farming in those sections of the country above named.

Among the most important experiments in top-dressing grass lands with different fertilizers those of Messrs. Lawes and Gilbert of Rothamstead, England, take precedence. "The land selected for the experiments comprised about six acres of the Park of Rothamstead, and it had been under permanent grass for certainly more than a century. Early in 1856, nine plots of half an acre each were measured off, for as many different combinations of so-called artificial manuring substances; two of an acre each to be continually unmanured, and two, also of a quarter of an acre each, to be manured annually with farm dung."

We cannot here go into the particulars of the whole series of the different plots and fertilizers but must content ourselves with some of the general results arrived at by Messrs. L. & G., viz: Where purely mineral manures were used, they greatly increased the growth of leguminous plants (clovers), with very little increase of the true or long leaved grasses. Where the purely ammoniacal salts were applied, the effect was to much increase the graminaceous or long leaved grasses, without at all increasing the growth of clover. Where a mixture of both mineral and ammoniacal manures were applied, the increase of hay was very striking, over that of the plots receiving the two kinds separately.

It was found that although the ammoniacal salts when used alone, gave an annual increase of only eleven cwt. of hay, the same amount of ammoniacal salts, when in conjunction with the "mixed mineral manure" (plot ten), gave an annual increase of one ton, fifteen and three-eighths cwt. of hay. That the combination of ammoniacal salts and the mixed mineral manure gave more than three times as much increase as the ammoniacal salts alone, and four times as much as the mineral manure alone. The average annual produce by the mixture of the ammoniacal salts and mineral manure, amounted in

fact to within less than a hundred weight of three tons of hay per acre, by the side of one ton four cwt. per acre on the continuously unmanured land."

The above statements seem to point out pretty conclusively, that for the greatest increase of our farm crops, the manure applied should contain all the necessary ingredients of the crops, both organic and inorganic, of which good farm yard manure is the "type." The above may be laid down as a general rule, to which there may possibly be some exceptions—as in the cases of superphosphate of lime for the turnip plant, and ammonia for the wheat plant. But the farmer who depends upon raising maximum crops, and keeping up the fertility of his soil for any great length of time, by the continued use of either class of manures alone, will ultimately find his system of manuring has been a bad one.

"Among the most interesting of the points incidentally brought out by the experiments, is the striking confirmation which the results afford of the (so to speak) special adaptation, in a course of practical agriculture, of certain of the crops of our rotations, accordingly as they belong to one or the other of the two great families of plants," the leguminous—clover, lucerne, peas and beans; and the graminaceous—wheat, barley, rye, timothy, and other long leaved or natural grasses. The "interesting points" brought out were, that the application of the mineral manures alone greatly increased the clovers, without anything like a corresponding increase of the natural grasses; while the effect of the ammoniacal manures was precisely the reverse. And, where the two kinds of manures were used conjointly, "the produce consisted almost exclusively of graminaceous plants. There was scarcely a clover or any other leguminous plant to be found on the plot."

The past season, Mr. Harris, of the Genesee Farmer, experimented on grass land with several kinds of fertilizers, both organic and inorganic, alone and mixed. The application of the several kinds of manure exhibiting similar to those obtained by Messrs. Lawes and Gilbert, viz., "the plots that were dressed with ammonia, superphosphate of lime, and unleached ashes, gave a very much greater quantity of produce than any others." "There is one fact that we must not forget to mention. The superphosphate and ashes on plot No. 6, brought in a large quantity of red clover. The effect in this particular was very marked. On plot No. 7, with ashes and plaster, there was also a little clover, but not one-tenth as much as from the superphosphate and ashes." The field experimented upon was a timothy meadow, six years from seeding. Mr. H. does not attempt to draw any conclusions from the results, intending to repeat the experiments next season.

The "Transactions of the Essex Agricultural Society, 1861," contains an interesting statement on top-dressing grass lands, by Richard S. Rogers, Esq., of South Danvers. He says, "There is no subject in agriculture deserving more inquiry, and of greater importance to the farming interests, than the knowledge of the best kind of fertilizers to be used for top-dressing grass



lands. As yet, but little is actually known by which to arrive at any practical results for obtaining the largest crop of grass.

"The desire of knowing something more definite and practical on this interesting subject, induced me the last season to institute in a small way a series of experiments, in the hope that I might derive some benefit myself, and be useful to others. Accordingly, in 1860, I selected a field best adapted to the purpose—very uniform in the sward, free from shade and other objections—and staked out five several lots, each measuring 250 feet long by 45 feet wide, and top-dressed with the various fertilizers as follows:

No. 1.—Two cords of manure, well rotted and mixed with  $1\frac{1}{2}$  horse carts of soil.

No. 2.—One hundred and twenty bushels of leached wood ashes.

No. 3.—Two cords green cow manure, the droppings of only a few days before.

No. 4.—Eighty bushels unleached or dry wood ashes.

No. 5.—Two hundred and twenty-five pounds of Peruvian guano, mixed with  $1\frac{1}{2}$  horse carts of brook mud.

"The cost or value of the top-dressing for each lot was as near ten dollars as possible. The grass was carefully cut and made—the first crop in July, the second in September—and accurately weighed, yielding as follows."

Mr. R. gives, in his report, well arranged tables of figures, showing the weight of dried hay of first and second crops on each plot for the years 1860 and 1861. But for want of space we omit his figures, and give some of the more important facts elicited.

The weight of hay on each plot for the two years, was as follows, viz., compost, 2,260 pounds; leached ashes, 2,520 pounds; green cow manure, 3,350 pounds; dry ashes, 3,340 pounds; guano, 2,240 pounds. The compost giving the least yield; green cow manure the greatest, but only ten pounds more than the dry ashes. The guano dressed lot in 1861, on its first cutting, gave only 730 pounds, against 1,300 pounds in 1860. The dry ashes very much increased the crop, the second year giving 1,350 pounds at the first cutting, against 900 hundred pounds the first year. "The green cow manure did well both seasons. The leached ashes likewise did well."

"The Peruvian guano is a great stimulant, and can be used for some purposes to great advantage but as a durable or permanent top-dressing for grass, excepting for one crop, I should doubt its efficiency."

Mr. R. says:—"Having turned my attention particularly to top-dressing my grass lands for several years past, I may be permitted to speak very confidently of the great advantage to be derived from practicing it, and perhaps have realized as much benefit as any one from persuading it."

We think if Mr. Rogers had left a plot of ground adjoining, of the same size, without manure, contrasting the yield with the manured plots, the "profit or loss," of the several different applications of manure, would have been more accurately determined. We should also have

been glad to have learned whether the growth of clover was greater on the plots receiving the ashes than on those that were top-dressed with guano and green cow manure.

That the green cow manure should cause a yield of hay so much greater than the same quantity of well rotted manure, no doubt may surprise some persons—a fact widely at variance with the general practice and theory of farmers, but facts are what are wanted. Of the correctness of Mr. R.'s statements and figures there cannot be a shadow of doubt.

In C. L. Flint's *Agriculture of Massachusetts* for 1857 and 1858, we find the statement of H. J. Hodges on the use of different fertilizers on grass lands. "In April 1857, staked off seven half acre lots on the Hampshire, Franklin and Hampden Agricultural Society's grounds at Northampton. Each lot was of precisely the same quality of soil and in the same condition, and in grass, timothy, red and white clover; six of the seven lots received a top-dressing, each with a different fertilizer, having one lot without any. Each lot was mowed at the same time, and managed alike, and the hay upon each weighed separately. The soil is a loam with sand and clay so well mixed that good judges disagree whether to call it sandy loam or clay loam—it is a cold land, and retains moisture late in the spring. The treatment of the lots was as follows:

Lot No. 1.—No manure.

No. 2.—Poudrette, two barrels.

No. 3.—Plaster, 500 pounds.

No. 4.—Superphosphate, 150 pounds.

No. 5.—Horse and cow manure, four loads.

No. 6.—Ashes, ten bushels.

No. 7.—Guano, 158 pounds.

Mr. Hodges gives a table of figure, showing the cost of the fertilizers; quantity of hay first and second mowing of both years, total value of hay at \$6 per ton, increase of hay from fertilizers first year, with the loss or gain first year from fertilizers.

The tables show that ashes is the only profitable fertilizer to be used as a top-dressing here. For two years the increase of hay is much the greatest, and the only lot on which the increase of hay paid for the fertilizer of the first year, and the increase of hay did not pay for fertilizer on any other lot for the two years. The lot where guano was used, gave greatest increase of hay for first year, but ashes did for second. Mr. H. very sensibly remarks, "it is not to be supposed that the same result would follow from different soils."

By his figures there appears to be a loss on all the fertilizers ranging all the way from 74 cents to \$6.44 for the first year, except on the ashes; here there was a gain of \$2.19. Why there should be such a similarity of action by the ashes in Mr. Rogers's and Mr. Hodges' experiments, and such a wide difference in that of the cow manure in the two experiments, is to us inexplicable. It is true we do not know how much a plot of Mr. R.'s ground unmanured would have yielded. The plot the first year with the compost gave 1,170 lbs. of hay; that with cow manure gave 1,600 lbs. The same plot second year



gave 1,750 lbs., while the guanoed plot same year yielded but 870 lbs.

In some places hay is worth, as put down by Mr. Hodges, but \$6 per ton; in others \$12 per ton; in others \$18, or more, per ton. At the last named price the figures would have presented quite a different face from that exhibited by Mr. Hodges in his tables.

To the importance of the hay crops in regions where farm stock must be fed from the barn from five to seven months each year, we have already alluded. Census statistics show that there has been a very great reduction in the number of horses, cattle and sheep in some of the northern States within the past twenty years. This decrease of farm stock is probably mostly due to a corresponding decrease of hay; if so, then it is a matter of high importance that means should be taken to increase it. This can be largely effected by top-dressing and irrigating grass lands. The statements quoted in regard to the first method we admit do not establish any general rule that will economically apply in all cases, seasons and soils. We have experimented to some extent in the use of both composted and green manure, both in spring and autumn, and always with satisfactory results. After spreading the manure we have usually sown grass seed—from one-third to one-half as much as if newly stocking down to grass—and then have thoroughly harrowed the ground, and sometimes have followed the harrowing with hand rakes, clearing off any obstructions that might interfere with the subsequent mowing and raking.

On many farms there are patches and plots of grass lands, yielding light crops of hay, that cannot well and profitably be plowed and cultivated arising from the rocky nature of the ground, or wetness of soil, or from the distance of the field from the barn. Such fields can frequently be top-dressed or irrigated to good advantage, and the interests of the owners of such should prompt them to experiment in one or the other of the above named ways. L. B.

—We have often called the attention of our readers to the value of top-dressing of meadow lands. Its great value, and the importance of the grass crop, is our only apology in occupying so much of our space at this time. It is very true that many of the fertilizers are not at hand with us and of doubtful utility here, but we wish to show with what care and expense the meadows of the Eastern farmers are the recipients of. That they well repay the farmers we have no doubt. With our soil and climate we cannot be expected to follow in the same routine, but adopt a practice that shall better accord with the condition of things with us. The hot sun that falls upon hay fields often so scalds the exposed roots of our timothy meadows that irreparable damage is done. To prevent this, we recommend a top-dressing immediately after the hay is removed. This will shelter the roots from the sun and give a good aftermarth for the sythe or the stock, and

the succeeding crop of hay will be very much better than if put on in April. We do not know what effect top-dressing in July would have on meadows at the the East, but we know that it is of more than double the value of that put on in April with us.

We, therefore, set the two modes side by side and trust that our readers will give it a fair trial. We spread on all sorts of barn-yard manure and litter—cornstalks, straws, or whatever comes to hand. In fact, we top-dress all crops when we use manure—never plow it under. In using manure with potatoes, top dressing is just the thing; so of rhubarb, asparagus, and all similar crops. Burying manure with the plow is too expensive with us. Ed.

### Farmers' Parlors.

As a general thing, in every farm house, there will be a parlor; and this statement will doubtless surprise many who are not farmers. It will surprise them because they cannot discover where they are. But if they look about a little sharply there will be seen a portion of the house shut up, and appearing as though neither door nor window had creaked upon its hinges for half a century. These parlors, I regret to say are sealed books, both to the family and their friends; and when they are opened upon some grand state occasion, they are redolent with the mustiness of ages. Now, my sisters, this should not be. I am, myself, the wife of a hard-working farmer; we began upon little, and have not a great deal yet; but I open my parlor daily, air and dust it, and use it constantly. I find it a great comfort to enjoy it with my friends; it is only respectful to give them the "best room"—it preserves also the carpet from moth and the furniture from mould, and makes ones house look as though it was inhabited and not a prison.—[Germantown Telegraph.

—"I love to steal a while away," said Floyd, and he stole it.

—No man, "living," should say an evil word against the doctors.

—The worst kind of a tent for a soldier to dwell in—discontent.

—What is society, after all, but a mixture of mister-ies and miss-eries?

—When a wise man plays the fool, a woman is generally at the bottom of it.

From the Chicago Telegraph.

## Present Status of the Immigration Question.

Mr. Edward Pelz, from New York, is visiting at present the Northwestern States with a view to revive, if possible, the spirit of immigration. The subject is of so great an importance for the whole Northwest that we think it our duty to direct the attention of the people to the plans of Mr. Pelz.

For the information of those who do not know this venerable gentleman, we give the following information about him. Mr. Pelz is well known in both the old and new country as a popular author, having acquired as such, a brilliant reputation. He is one of those noble characters that had to turn the back to the father-land for having served it too faithfully in defending the people's cause of freedom. But when he arrived on our safe shores, he was at liberty to work for his friends and countrymen. Mr. Pelz soon began to see that many of these would be happier here. Through letters, pamphlets, etc., he informed them of the true conditions of this country—the echoes of his voice sounded through the whole of Germania, Sweden and Norway, and there was opening that memorable flood of emigration of the years 1850-54 that has built up the West. Mr. Pelz enjoys the unconditional confidence of his countrymen here as well as abroad, which he has mainly gained by his honesty and disinterestedness, being ever forgetful of self, and having only the welfare of his adopted country and its people in view. The characteristic name of "old Papa Pelz," bestowed on him by the people, gives the best evidence of his praise-worthy qualities. Though now sixty-two years of age, his mind and body are still as fresh and vigorous as those of a youth and once more he will try to stir up a new movement in behalf of immigration so much needed at the present to promote the prosperity of our country. We wish him the best success and succor for our Western men, knowing that no man on this continent combines so many favorable qualifications for carrying successfully through such a movement; for Mr. Pelz is not only an author, but also an experienced farmer and a business man, besides being acquainted with all the secret resources in Europe and America, of which we must avail ourselves in this agitation.

Mr. Pelz speaks on this subject as follows:

"It is often pretended by well informed persons that it is not the time at this present moment to promote emigration, because there was no inclination for emigration prevailing in Europe, and nobody would come from hence to our country involved in a war. But by letters which I have received from old friends in Germany, I can conclude that there prevails at this very moment a strong inclination for emigration. They mention as one of the principal reasons the fear of an extensive war that is regarded as inevitable. Yet, at the same time, my correspondents remark that a much greater mass of people would emigrate to the United States, toward which they

are turned, were it not that our secession disturbances keep them back; that everybody thought the whole territory of the United States overflowed with this war, and that antagonists of emigration did not fail to make capital out of this error. As a proof, I received a number of popular songs, which were composed in order to frighten the people of this land where 'bloodshed, want of employment, hunger and disease rage.' The fact that such efforts are taking place gives the best testimony of the existence of a great inclination to emigrate, which certainly ought to be used by us in the proper way to increase our emigration which has sunk so low during the last few years.

"The mentioned drawbacks of emigration operate together with efforts from other sides to attract the German emigration. Brazil has allowed one million dollars for purposes of emigration; Buenos Ayres seems likewise to have made stipulation for this purpose, as I recognize by certain signs; Australia offers to emigrants free passage and other facilities. One hundred thousand pounds sterling are, as I am assured, set out to entice German emigrants to Canada. This is a masked system of recruiting, and John Bull has learned something of our Yankees, who withdrew labor from the Germans in order to get them among the 'free-will volunteers.' On their arrival in Canada it is very difficult for them to find employment, even at the wages of twenty-five cents per day for the hardest work, and John Bull thinks in this way to catch about 100,000 men for his army. The celebrated Mich. Chevalier, the great national economist, has lately shown in the Senate of France that there was now a favorable time to draw German emigrants to Algeria. Different facts make me presume that he has not spoken in vain, and French bounty has already taken effect in Germania.

"While Europe operates in so many different ways against emigration in general, and particularly against that to the States; while named countries are spending at the same time large amounts of money to the press, establishments of emigration, and in other directions, in order to draw the stream of emigration toward themselves we remain idle; and for years I have begged in vain at the most influential places, that at least the most necessary steps might be taken to forward this cause. To hide the inclination of doing nothing, this last time, they raised the laughable objection: 'The war must first be brought to an end!' A farmer would show himself just as stupid in saying: It must be summer before I can move to cultivate the field. If asked how immigration can be promoted, I would recommend the following systematical proceeding:

"1. There must be established a Department of Immigration for the Union, whose duty it is to effect, through honorable means, an increase of immigration in general.

"2. In all the States that are yet needing immigration, funds should be raised which shall be disposed of by the Governor in such ways as he deems suitable.

"3. It is for the interest of all places and counties needing immigration, to make special

arrangements in their own behalf to attract such. They must be assisted by all possible ways by the Union and State. All the inhabitants should consider the advantage resulting from an increase of population, developing a useful activity.—Those who have connections in Europe should make use of it, thus helping to create a steady flow of immigration. It must be sustained by practical pamphlets, letters, &c.

"It is very desirable that the most influential men of the Northwest unite in laying a petition before Congress in relation to said subject.

"As to the success which I have had, I will state that the Secretary of the Interior, Mr. Caleb B. Smith, has given me the written assurance that he would carry out my propositions as soon as Congress would pass a law referring thereto. Persons of influence will urge the different railroads leading to the West to unite in taking such steps as shall increase the facilities for immigration. In Chicago they opened me prospects of making at the next session of the Legislature a motion in behalf of immigration purposes."

¶—We think this an opportune time to agitate this subject. The war has seriously reduced our laboring population and small farmers, and their places could be filled to advantage by the German emigrant. It is demonstrated that a large part of our State is adapted to the grape, and that this new branch of business will open a wide and profitable field to vine cultivators from the German States. There is no portion of the West that offers to this class of industrious emigrants, a more inviting field for their labors than the Prairie State, for there is certainly no State among those of the West so well adapted in soil, in climate, and access to markets for the small farmer as this; at the same time the large prairies afford abundant scope for those who have the capital and taste for large farms. We hope our Legislature will take the matter in hand and give such aid in the way of bringing the value of our State to the comprehension of the German emigrant, so as to induce them to settle with us. We would hold out no inducement to the purpose but simply to bring the value of our location to to the knowledge of the industrious laborer and of the small farmer. The rich emigrant will take care of himself, but the other classes need information, not money, so as to direct them in the cheapest and best manner to our soil. ED.

**THE CURL OF THE PEACH LEAF.**—The "Ohio Farmer" says the remedy for the blistering of the peach leaf is to sprinkle the trees, just before opening of the flower buds, with a mixture compounded of equal parts of lime, flour of sulphur and soot, dissolved in water.

—An evil conscience is the greatest plague.

## Plant a Few Beans.

Friend Harris, of the Genesee Farmer, annually discourses upon beans. His reflections on this topic for 1862, appear in the May number, and are as follows:—

### CULTIVATION OF THE WHITE BEAN.

For years we have earnestly advocated the more extensive cultivation of the white bean as a field crop on American farms.

The great need of American Agriculture is a good "fallow crop"—some plant that will stand our hot, dry summer, enrich the soil, and allow the use of the horse hoe to clean the land during its growth. A plant, in short, that shall occupy the same place in our rotation as the turnip does in English agriculture.

The white bean comes nearer to this than any other plant yet introduced. If the beans are consumed on the farm—as turnips always are in England—their cultivation would add materially to its facility. There can be no doubt on this point. All the leguminous plants—including clover, peas, vetches, beans, etc.—contain large quantities of nitrogen, and this when consumed by animals or plowed under, becomes ammonia—the very thing which we most need for the growth of the cereals.

Let us then grow beans. No crop will pay better. When prices are good, as at present, they can be sold; and if prices fall, they can be fed out on the farm with advantage.

In regard to their cultivation, we have written so much in previous volumes that little need be added at this time. They are generally grown on warm, light soil, but will succeed on almost any soil if properly cultivated. For this, as for all other crops, the land should be well underdrained, either naturally or artificially. The land may be plowed in the fall and again in the spring, and made clean and mellow before planting; or a clover sod may be turned over and the beans planted at once. The common "white medium" is generally considered the most productive variety, but the White Mountain or Morrow yields nearly or quite as well, and brings a better price. It is a little larger, rounder, plumper and handsomer, and is gaining in popular esteem.

They may be planted in hills  $2\frac{1}{2}$  feet apart, and 15 to 18 inches apart in the rows, dropping five to six beans in each hill; or they may be drilled in with a machine, in rows  $2\frac{1}{2}$  feet apart, and a single bean 2 inches apart in the rows. The latter, perhaps, gives the larger crop, but the former requires much less labor in hoeing, etc. In this section they are generally planted the first week in June.

—"Mick," said a bricklayer to his laborer, "if you meet Patrick, tell him to make haste, as we are waiting for him." "Shure an' I will," replied Mick; "but what shall I tell him if I don't meet him?"

For the Illinois Farmer.

**Patent Bee Hives.**

ED. FARMER :—A great deal has been said and written about patent bee hives, or those that have the moveable frames, and I propose to say a few words more, not in the praise however of either Langstroth's or Phelps' patent, which differ so little that the advantage of one over the other exists only in the brain of the persons who fill the air with their cries, at our State and County fairs, to the disgust of all sensible people. I have had the charge of a small collection of swarms for the past three years, the hives consisting of Langstroth's, both single and double chambers, Phelps' moveable frame and two section hive. I propose to take each in its order as above, and point out the defects of each, as they appear to me. The colony first consisted of four swarms in four of Langstroth's patent hives, two being in single hives, and two in double hives, having an air chamber between the boxes; the two swarms in the first mentioned hive done well, and have each year made from five to fifteen pounds of surplus honey, have also thrown off a young swarm, and are this season doing well; those in the double hive have not made one pound of surplus honey, have only swarmed once, at this writing one is destroyed, and the other barely alive. The cause of this is easily explained, the air chamber being large the miller had free access, and every crack, joint, corner and crevice was filled with eggs, which required daily attention, and having been sick a week, I found on my recovery that every comb was full of worms, and all the bees dead. Having received a couple of Phelps' hives, the young swarms were put into them, and although all who worshiped Langstroth's hive said the bees would all die, they have all done well and made more surplus honey than those in Langstroth's. I consider them the best hive of the two, because the frames are shorter and higher than the Langstroth's, the bees are not in so much danger of freezing in winter, not having to spread out so much over the combs. I also had a double section hive of Phelps' patent, it consists of two separate boxes, with a passage between for the bees, and a common entrance from the outside to both. Being told by old bee keepers that the bees would certainly perish, I had some misgivings about putting in a swarm, but having used all the other hives on hand, I put in one swarm, they staid until near night and then took french leave. A good beginning think's I. The bees knew that

if they staid in that hive they would die, so prompted by instinct they movek to safer quarters in some old tree. but not being so easily convinced as the bees, I determined to try it again, but remembering of seeing cross sticks in the old box hive for the bees to roost on, I concluded to put in some, as the hive does not contain frames, being a square box with a glass back. Well when the next swarm issued they were put into this hive, they staid perhaps two hours, then came out again, lighting near by, I caught them again, put them back, and it being near night, fastened up the entrance to make sure of them for the night, early the next morning removed the blocks and they went to work, but near night they came out again, lighting near by, I put them back, and probably concluding that they might as well stay there and die as anywhere else, they staid. They went to work, filled up the section that they were hived in, then the other section, and then filled three surplus boxes full and nearly filled another, each containing about eight pounds of honey. One of my Langstroth friends said they would die when winter came because the bees were divided some being in one side and some in the other, but when the honey season was over, those bees in the second section moved into the first one and staid there until spring, when the honey was removed, as they required it for their young brood. The queen bee has never left the section that she was hived in, or at least has never laid any eggs in the other part, and I expect to get at least forty pounds of honey and a good new swarm from this hive this year. There has been many millers around this hive, but the boxes being made tight, all their efforts to get in have proved futile. There is a moth trap at the bottom of the hive and many worms have been taken out of it, but if the crack had not been there for the miller to lay eggs in they would not have been there, so I conclude it is of no real advantage, as any cracked board laid on or around the hive would answer the same purpose.

Now from my little experience and observation I have come to the following conclusions: first, that patent hives of whatever kind are as unnecessary to keep bees successfully as the curl to a pigs tail; second, that a box ten by twelve inches square and fourteen inches high, with a loose bottom board, cross sticks and a space above for surplus honey boxes, will answer just as well, and be better than a patent one; third, that the miller will get into any hive if not well made, if



the swarm be a weak one, strong swarms not being at all liable to damage by them; fourth, that the advantage of being able, by the aid of movable frames to get at your bees to examine them is all useless, because by so doing you disturb their labors, break their sealed comb, irritate them so that no one can come near, and if done too much totally destroys them. Of course if any person has the curiosity to examine into the habits of bees, or wants to exhibit them at some fair, let him use a patent hive, but to make them pay as they go a well made box hive is the best, it should be ventilated above and below by fine wire cloth nailed over inch holes. There is no necessity for ventilating the honey boxes for the bees stop up all cracks and crevices as soon as they begin to fill them. I know that by publishing this you will raise a perfect storm in the breasts of the patent hive men, but they and practice are two things; with them, their desire being to sell rights and hives, and mine to prevent people from going to a needless expense.

#### ANTI PATENT.

ANTI PATENT is rather severe on the patent hives. For the common practical bee keeping he is doubtless right, in his box hive theory, yet it must be conceded that we have learned much, very much from such men as Langstroth, Phelps, Quimby, Weeks and others of this class, but it is certain that the attempt to get up something novel by others, have run the thing into the ground. To the farmer who keeps a dozen stand of bees, the box hive, with caps for surplus honey, made smooth and tight to keep out the moth, with well painted outside to ward off shrinking and swelling will be found valuable.

ED.

**REMEDY FOR RINGWORMS.**—The North British Agriculturist says that the disease locally known as ringworm or tetter, which shows itself about the head and neck of young cattle, in the form of whitish, dry, scurvy spots, can be removed by rubbing the parts affected with iodine ointment. The disease may also be combated by the use of sulphur and oil; iodine ointment is however to be preferred. As this skin disease is easily communicated to the human subject, the person dressing the cattle should wash his hands with soap and hot water after each ointment.

**MULCHING—CAUTION.**—A writer in the Wis. Farmer, says he mulched his young orchard trees with unrotted manure, and the consequence was, as the manure became rotten, the white grub became so numerous that they ate the bark off around the roots and killed many of the trees.

**WHITE-WASHING EXTRAORDINARY**—The Rev. James Williams, the well-known and philanthropic missionary, so long resident in the South Sea Islands, taught the natives to manufacture lime from the coral of their shores. The powerful effect produced upon them, and the extraordinary use to which they applied it, he thus facetiously describes:

“After having laughed at the process of burning, which they believed to be to cook the coral for their food, what was their astonishment, when in the morning they found his cottage glittering in the rising sun, white as snow! They danced, they sung, they shouted, and screamed with joy. The whole island was in a commotion, given up to wonder and curiosity, and the laughable scenes which ensued after they got possession of the tub and brush, baffle description. The high-bred immediately voted it a cosmetic and kalydor, and superlatively happy did many a swarthy coquette consider herself, could she but enhance her charms by a daub of the white brush. And now party spirit ran high, as it will do in more civilized countries as to who was and who was not best entitled to preference. One party urged their superior rank; one had the brush, and was determined at all events to keep it; and a third tried to overturn the whole, that they might obtain some of the sweepings. They did not even scruple to rob each other of the little share that some had been so happy as to secure. But soon new lime was prepared, and in a week not a hut, a domestic utensil, a war club or a garment, but was as white as snow; not an inhabitant but had a skin painted with the most grotesque figures; not a pig but what was similarly whitened; and even mothers might be seen in every direction, capering with extravagant gestures, and yelling with delight at the superior beauty of their white-washed infants.”

**Cotton** growing is to be tried in Western Pennsylvania. The Erie Dispatch says a number of citizens of that country propose to test cotton culture this season, and adds:—“The experiment has never before been tried; but from the mild temperature of the climate late in the fall, rendered so by the waters of the lake tempering the cold north winds over a belt of land several miles, and extending from the State line almost to the western bounds of Ohio, it is confidently believed that cotton can be successfully raised here.

**Strawberry** culture has been attempted the last fifty years, but it is only quite recently and since the sexual fertilization theory has been understood, that complete success has crowned the effort, and the strawberry become a berry for the million.

**A good way of observing Lent**—Paying back borrowed money,



From the New England Farmer.

### Ornamental Trees.

Around every dwelling there should be a plantation of ornamental trees, oaks, elms, maples, firs, and indeed all the various species of indigenous trees, with which Providence has so beneficently blessed our land. Nothing adds more to the beauty and desirableness of a country residence than the presence of these splendid creations; even the humblest cottage derives a sort of elegance from them, and becomes an object of interest by the mere charm of association. Many of our forest trees of the deciduous kind, are unsurpassed in elegance, and are so easily obtained and propagated, as to place them within the reach of every person. The elm is a vigorous and rapid grower; so also is the oak, in all its species, the maple and the glossy beech. Of shrubs and evergreens, there are innumerable varieties, all of which bear transplanting, and flourish vigorously on almost every description of soil.

### Remedy for Hog Disease.

A correspondent of the Rural New Yorker says: "We take the position that when a hog is attacked with the aforesaid disease, it will surely die, and our experience up to this time has confirmed this opinion. But in every instance where pitch tar has been administered to the hogs, the disease has been arrested, at least in all instances that have come under our observation, or to our knowledge, and we are firmly of the opinion that the above remedy is a pure preventative, if not a cure. The above remedy is prepared in the following manner:—Two tablespoonfuls of tar to a pint of boiling water. When thoroughly melted, mix with half a pail of bran, and then fill the pail with milk. This makes a sufficient dose for six hogs."

### Remedy for Worms in Dried Fruit.

Dried apples and some other varieties of dried fruit, as all housekeepers know, are subject to worms. The following is said to be a remedy:

Put in common muslin bags with a little sassafras bark scattered through, a handful of bark to a bushel of fruit, and no worms will trouble them, as I have proved by keeping dried apples two years in a pantry.

**WINE MAKING IN NEW YORK.**—The business of wine making is pursued in many places in the State of New York, and among others in Hammondsport, Steuben county. The Wyoming Mirror says that a stock company has been organized under the name of Pleasant Valley Wine Company, for the manufacture of pure wines and brandies from native grapes. The Company employ an experienced German vintner, and claim to manufacture an excellent article. Within two years the Company have turned out 10,000 gallons of wine.

From Gardener's Monthly.  
**The Fruit Tree Borer.**

We recently called on a friend who is famous for the success of his apple crop. He is no believer in the generally received opinions about "changes of climate" since the days of our forefathers, "wearing out of soil," "degeneracy of varieties," and the theories that are satisfactory to most people for their ill success; and we asked him for his "recipe" that we might add it to the number we have already on file.

"My plan," said he, "is simply to keep away the borer." "The borer," he continued, "weakens trees, and once weakened, the fruit drops before it is mature, or it cannot recover from the slightest injury that any insect inflicts on it; moreover the tree becomes sickly, and then insects prey on it; for they do not like healthy trees. Insects have an office in nature to perform which is to hasten to decay what nature has intended to remove from living families, just as worms soon take away the life of a sickly pig."

"Easy enough talking," observed a friend with us, "but how do you keep away the borer? Tobacco stems?"

"No."

"Lime?"

"No."

"Ashes?"

"No, none of these."

"Pray, what then?"

"Now you give it up, I will tell you. I merely keep the soil scraped away from the trunk down to the bare roots all the year round—summer and winter."

My companion laughed incredulously, if not contemptuously; "and," said he, "friend C., I have given you credit for better understanding than to suppose any amount of freezing or roasting will kill a borer once domiciled within the trunk of the tree."

"I do not suppose it will," he replied, "I have no such object. If I can ever find one in, I trust to my jack-knife or wire for his destruction, and not to heat or frost."

This was a poser.

"What then is your object?" was the next inquiry.

"It is to keep the borer out. Did you ever see the borer enter into the stem of the tree at any height above the ground?"

"No."

"And why? It requires soft moist bark for the purpose; and whenever you remove the soil and render the bark hard and firm to the collar, the borer instinctively goes to other more favorable places for the secure raising of its young."

"But will they not go into the main roots?"

"I have found them to avoid these roots as if it were unfit to rear their young; in fact, I have never known them to attack mine."

Nor had they; that was evident. A clean, healthful orchard—never cropped, annually top-dressed, grass kept away several feet from the stem, so that no insect could find a "cool and moist" harbor for its larvæ, and every success following. Certainly the borer did not attack these

trees; and the novel seasoning struck us as so philosophical, that we thought it worth recording in our pages, for further observation, and—for we want to be repaid for the suggestion—report in these pages.

From the Ohio Valley Farmer.

### Grape Sickness.

*Read before the Cincinnati Horticultural Society, April 5th, 1852.*

The following passage in Liebeg's Chemical Letters, seems to me to lead to the solution of the inquiries as to the cause of grape sickness. He says:

"We see that, in a soil too profusely supplied with salts, they are effloresced upon the surface of the leaves, in consequence of this surplus of mineral substances. This is especially observable on plants with heavy foliage of great surface, so as to evaporate great quantities of water.

"The disease here spoken of takes place in a period when, after continued dry weather, the plants being near their development, but not quite matured, the ground becomes thoroughly soaked by severe drenching rains, and these are followed again by dry, warm weather. A strong evaporation ensues, and in consequence thereof, the roots take up a greater quantity of salts than the plant can use. These salts effloresce upon the surface of the leaves, and show the same effect upon them as if a solution of salts had been poured upon them of greater strength than the organism can bear. Of two plants of the same kind, the disease always strikes the one which stands nearest its matured development. A plant which is later in its development, or delayed in planting, may be favorably affected by the very causes here indicated."

In connection with this extract, it may be well to examine the comparative table furnished by Scheebler, as to the power of the respective soils to retain water:

Quartz.....	22	parts
Gypsum.....	27	"
Lime Sand.....	39	"
Hard Pan.....	40	"
Blue Clay.....	50	"
Pure Clay.....	70	"
Fine Lime Earth.....	85	"
Humus.....	190	"
Garden earth.....	89	"

A German Agricultural journal remarks upon this table:

"From the older and newer experiments made we may conclude that the power to retain water is smallest with sand and sandy soils. It depends, upon the fineness of the grain; for, while coarse-grained sand retained only 20 to 26 parts, fine grained took up 40 parts. Through greater mixture of humus, the water-retaining power is greatly increased; a sandy humus soil took up 50 parts. Clay possesses a far greater water-

retaining power than sandy soils, which, like common farming grounds, are mainly mixtures of these two substances, take up the more water the more clay they contain.

"Very interesting is the action of carbonic acid lime on the soil. If it exists as sand, its water-retentive power is very near that of quartz sand, while, when it is in a pulverized earthy state, it exceeds even that of clay. Humus and turfy earths can retain the greatest amount of water, and the greater the amount of humus in a soil, the greater is the water-retentive power."

These extracts are furnished for the purpose of directing the attention of vine-yard men to the suggestions they force upon their consideration.

1. It is certain that we have most grape sickness in a season with a dry May, followed by a wet June, especially when the June rains are followed by warm sunshine.

2. Grape sickness is always preceded by marks upon the leaves.

3. Grape vines with the heaviest foliage and the greatest flow of sap are most affected.

4. The disease always takes place just when the berries are developing toward full size.

5. Our limestone soil is in that earthy state which, it is said, has even greater water-retentive powers than clay, and in such soil the grape rot is always greatest.

6. Our soils are excellent corn and grass soils, in accordance with the remark of Liebeg, that the same causes which produce diseases in one plant act favorably on others.

It seems more than likely that we have no, or very little, remedy against the action of vines here explained, though, doubtless, in the course of time it will be steadily diminished. It teaches us however, one lesson, that at present we must not use manures in vineyards rich in salts. I would also suggest that the first rough dressing with the hoe be delayed till late in May, so that the vine may reach its development later in June than now. I also venture the remark that the points herein presented favor the removal of all roots annually, except those at the foot of the vine and at the joint above the foot; at least to have no roots within twelve inches of the top soil. A mode of surface-drainage might also prove of advantage, which, to be of real use, would, however, have to be of such a nature as not to keep rains from the vines at those periods of the year when we have no wish to guard against the evil herein treated of.

The Society will please receive the whole of this contribution, which merely invites persons interested to the subject, because it struck me as one of the pathways which might lead to a solution upon this, to us vineyard men, perplexing subject, and which does not claim to present matured opinions.

—The young lady who burst into tears has been put together again, and is now wearing hoops to prevent the recurrence of the accident.

—Favorites are like sun-dials; no one looks at them if they are in the shade.

## Delaware vs. the Concord.

ED. IOWA HOMESTEAD:—I have read your explanation why you consider the Delaware second to the Concord, but unfortunately have not the copy of your valuable paper before me, in which it was published, as it is kept nicely on file in the library of our Horticultural Society. But from memory I think you said you considered "the Delaware second to the Concord in *all* respects except quality, in which it *may* excel." \* \* \* The Concord produces much larger fruit, is an earlier bearer, more prolific, and a stronger grower." I may not give your exact words, but I believe the sense is about what you have wished to convey. I have taken the liberty of italicising two words, which you used, and which I think are calculated to lead your readers astray.

You say you prefer the Concord in all respects except quality, in which it *may* excel. From this and your succeeding remarks, introduced what was said by Mr. Hussman, of Saint Louis, I am led to infer that you do not speak from your own knowledge, but predicate your theory on the experience of authority not only out of this longitude, but out of this latitude also; and if I am not in error, one of the grave council who voted a few years ago, to "strike the Catawba from the list of grapes for general cultivation," notwithstanding its great success at Cincinnati and Nauvoo, as well as in almost every other locality in the Middle and Western States, where it had been tried, simply for the reason that *it had not succeeded at Hermann*. I remember also that at the same wise conclave it was decided that "Norton's Virginia's Seedling" was the best grape for general cultivation; and I think the reason was, that "there had not been a well authenticated case of mildew proven against it." I would answer all such arguments by offering to substitute the common wild grape of our forests, instead of every variety of cultivated grapes, "because there has not been a case of mildew known with them;" besides, they know how to take care of themselves, are very hardy, &c.

The Concord grape was recommended some years ago, by Mr. Charles Downing, as "a good market grape," for the same reasons your preference is based upon,) size, and outside appearance. But Mr. Downing is repentant, and "sorely regrets that he ever made the recommendation," because "it has induced many persons to plant of it extensively, and now finding that they can get better sorts regret that they did not do so at first."

The last paragraph is condensed from a statement made by one of his intimate friends, before the Farmers' Club, N. Y., and I think is very applicable to your case. There are hundreds and perhaps thousands of people in this State, looking up to you for guidance in what they shall plant, and your recommendations should be of that character that will stand the test of time, and it is certain no grape, of such inferior quality as the Concord, can stand very high in comparison with the Catawba, Delaware, Diana, Lincoln, Lenoir, and Herbemont; all of which

with a score of others, stand ahead of your favorite in quality. Then as regards the early bearing, fruitfulness, &c., I can give you a chapter from actual experiment, with the vineside by side, of the same age, the Delaware always leading off ahead of its coarse grained, uncouth neighbor; and when they went to market, the Concord went begging at twelve cents per pound while the Delaware sold readily at fifty cents per pound. We should be careful how we recommend inferior  
"GRAPES."

REMARKS.—Our correspondent quotes correctly, and therein lie the grounds upon which we based our preference for the Concord over the Delaware. Although quality in any fruit, is *one* very important desideratum, there are other considerations to be taken into account, when making up its aggregate merits. We do not "predicate" our "knowledge," or opinion of the two varieties of the grape in question, either upon our own "theory," or that of any other person, as implied. If the writer had followed us up, for the last fourteen years of our connection with an agricultural journal, he would have learned ere this, that we are not much given to theorizing. But we have ever felt bound to receive the opinions of others, to strengthen our own convictions, when given honestly and in good faith.

"In 'introducing' Mr. Hussman, we did no more than the writer does in quoting Mr. Downing. It is but fair that he should accord to us, and without suspicion, too, the same privilege exercised by himself.

When we see a Concord vine producing between four and five pounds of perfect fruit, and a Delaware of the same age, and under the same treatment, produce less than one *half* pound, we must believe, until otherwise convinced, that of the two, the Concord is *the* vine for the million—that it will yield more profit to the cultivator, at even twelve cents per pound, than the Delaware at fifty cents.

The Baldwin apple, so highly esteemed at the East, owes its popularity, if we mistake not, to its great productiveness, good size, and *fair* quality. The Wilson Strawberry, which is more sought after than any other, owes *its* high character to great productiveness and size. No one will pretend that it is equal in quality to some other varieties that might be named.

The writer impliedly objects to the introduction of Mr. Hussman in evidence, but introduces Mr. Downing, of New York. As Eastern evidence is admissible, we will produce the Fruit Growers' Society of Eastern Pennsylvania, who decided by vote, last fall, that the Concord was the best grape for general cultivation. And, as it was good enough for Mr. Downing to recommend at one time, he *may* change his taste again.

The writer seems to speak disparagingly of Mr. Hussman, because he discarded the Catawba, "notwithstanding its great success at Cincinnati." Will the writer look over the reports of the Cincinnati Horticultural Society, and let us know what trouble the mildew has given the cultivators of the Catawba there?

But give us your chapter of actual "experiments." It is just what the readers of the *Homestead* want, and we consider ourselves fortunate in having provoked its production.

The Concord has met our expectations and more. It has produced excellent crops of excellent fruit; but no one would rejoice more than ourselves, to find a grape in every respect its superior. "Let there be light."

EDITOR HOMESTEAD.

We pretty fully concur in the above. That we have seen the Delaware make good growth and a fine show of fruit, in some particular locations, we are free to admit, but that it is a grape for general culture in all locations we most emphatically deny, while we have yet to hear of the place where grapes grow at all that the Concord does not flourish. In this respect it is the grape for the million.

That Mr. Mattier, at Cincinnati, succeeds well with it, we have no doubt; our personal acquaintance with him warrants us in the belief that he is sincere in his statements. While the Delaware grows luxuriantly at Quincy, it will not grow with us, and yet we are in the same parallel of latitude: there the soil is charged with lime while here it is not, showing that soil, not climate, has a most decided effect on it. Our Concords, set last year, are loaded with fruit, and making a vigorous growth, while the Delawares have no fruit and make but a feeble growth, and yet the latter are well cared for, have the advantage of a rich border and against a six feet whitewashed wall. We shall continue to plant and to recommend the Concord until we have some new testimony in the premises other than that drawn from those intrusted in the sale of Delaware vines at a dollar each

ED. ILL. FARMER.

### Unsound Wheat.

CHICAGO, MAY 30, 1862.

*To the Editor of the Commercial Express:*

With much pleasure I notice your remarks in yesterday's issue under the above caption, and although it covers the points fully, as to the results that ought to be attained, perhaps I may be pardoned for offering a few remarks the importance of the subject being my apology for trespassing on your space.

The subject of cleaning Wheat is one only in its infancy at the West as yet, which has been fully proven by the advantages held by Eastern Mills in flouring Spring Wheat until within a short time. There they (very wisely) stopped at no expense in proper appliances for thoroughly cleaning their Wheat, and so enabling them to make a better flour for market, with a greater yield, than the Western Miller. The last few years, however, has made a great change in this

section, on the part of millers with regard to cleaning grain; this will account for so much inferior grain (as graded here) being bought by the Eastern miller.

Now, what we want at Chicago, is to raise the standard of our Wheat, and instead of offering a premium for men to mix filth with their grain—to make it an object for us to receive it in the best possible condition—so that instead of being driven from some markets as we are now, we might take our position as not only the largest, but the best Wheat market. We never can arrive at this until our Wheat is cleaned better. The remedy proposed—letting the farmers clean it—will not (while the country is so new) answer the end, as the farmer has no means to buy the requisite machinery. The fanning mill is the only thing he dreams of using, and this more often than otherwise is not in a proper order, and besides the small amount for each farmer would not justify the expense. The warehouseman in the country can see no object in cleaning the grain properly, while he makes it so profitable to buy all the screenings from the nearest mill to mix with the farmer's already dirty grain (and in this connection I will call your attention particularly to the great injustice done to the farmer who is silly enough to think he can get an increased price for Wheat over his neighbor who carried it direct from the threshing machine.). This brings us to the grain to Chicago. Here it is thrown into the large bins, with filth, dirt, smut and all, and the result is stump-tail. Can it be wondered at. Some one here insists that the separators in the warehouses at present do not remedy the evil. Granted, and for what reason? That the cleaning is not thorough enough. When they were first introduced they were thought to take too much out, and buyers and sellers could not afford to lose one per cent. of their grain. Now (less than four years used) they do not clean thoroughly enough; besides, in our go-ahead style, rapidity, not efficiency, is the desideratum; so, to increase the quantity, the riddles are taken off and only a blast applied which does but little good, grain thrown directly into it instead of gently and thoroughly spread to meet it. Why it is economy to store the grain with smut to daub it, and filth to prevent circulation through it, and ship it to injure still more in its transit, and pay freight, insurance, elevating, &c., on all this foreign matter, to be sold at the mill for one-sixth the price it cost, it will take some of our knowing grain men to tell.

The proper place undoubtedly to clean the grain is at the warehouse in the country, where the farmers should pay the proprietor so much for cleaning his grain, and then sell it to him, but until a uniform custom in this respect is established, it would not be practicable. The only remedy then is, to put the proper cleaning machinery in the warehouses here, clean the grain in the same manner that mills clean it, so that no smut ball pass the warehouse; the oats, sticks, false buckwheat, &c., shall be removed, and then the grain, if sound, cannot injure in shipment. Parties shipping to Europe can make arrangements at Oswego or Buffalo for special bins to receive the wheat; from them it can be discharg-

ed to canal boats and transferred by floating elevators at New York on board the vessel. Now, which is the cheaper for the foreign buyer—to purchase the dirt at Chicago, or New York, or Liverpool? Unquestionably the former place, as he has saved all expense on worthless stuff from that point. Another advantage gained by such an arrangement would be, that having given the grain a cleaning here, the character of Western wheat in the estimation of foreign buyers would be improved, as when this same grain was received at the mill it would then be cleaned again by them, and any one acquainted with the necessity of not only thoroughly *separating* but *scouring* our grain, would at once perceive the advanced value there would be to our grain by reason of the improved color of the flour. In this way there would be less white winter wheat flour from spring wheat made in Michigan, and more of our spring wheat used in Philadelphia, Pittsburgh and other points where they now regard spring wheat from Chicago in their mills as they would the plague. What we want is the best character for our wheat at Chicago, and leave it in the best merchantable condition in Liverpool with the least cost to the farmer, who really has to pay all the losses.

CLEAN GRAIN.

—Every farmer who has a barn should own a good fanning mill, none of your blast fans like the eagle, but one with a complete set of sieves and screen, like those of Goodrich, of Aurora, by which you can thoroughly clean any kind of grain or seeds, and which if well used, will last a century; but if you lend it, as we have done, its days will be few and full of trouble. ED.

### The Raspberry.

The fruit of the raspberry is productive upon suffruticose stems, which spring from the ground either in the same or the previous year. In most of the kinds it is produced upon lateral shoots, which are borne by the previous year's canes. This fruit shrub differs from others of its class in the stems not being persistent, but only of annual duration. They are of an herbaceous rather than a shrubby character. The object of the cultivator should be to get these annual shoots as strong as possible; and, as multiplicity of suckers are thrown up by all the kinds (but the true yellow Antwerp, which propagates with great shyness), they must as soon as they can be seen, be reduced to two or three shoots which are to form the canes for next year's crop. Care must be taken to secure them from the action of the wind by securing them to stakes, and whenever the preceding year's crop of fruit is over, the removal of the old canes will be an advantage to the young ones. Two or three canes may be tied to a single stake, at the distance of five feet each way. This distance may startle the amateur, but where it can be given, it is a decided advantage; and those who cannot af-

ford so much, must bend to circumstances and do with less.

[We think the stakes useless, and prefer to cut back at the time of the winter pruning to within two, or at most, two and a half feet of the ground. We have discarded the whole family of English raspberries as well as a part of the American—the Black Cap, Purple Cam., and Brinklies' Orange are the principle ones left; the others will scarcely repay the trouble of culture with us of the prairie. Had we a good snow covering for winter, the list could be extended.

ED. ILL. FARMER ]

At the time of the winter pruning the points of the shoots may be shortened a little and fresh stakes put to them, which completes the process for the season.

The formation of the flower-buds may be retarded, and a late crop of fruit obtained by cutting down some of the shoots to within two or three eyes of the ground. New and vigorous shoots will be produced from the eyes, which will not form their fruit till later than others, and thus the season of this desirable fruit may be much prolonged. The double-bearing is a valuable kind, and should have the canes of the alternate stools cut down to two or three eyes annually. They will thus give fruit almost till Christmas, in mild seasons. The finest fruit is in all cases produced upon the strongest and best ripened canes. Full exposure is therefore necessary to obtain these, and single rows will, on this account, always be found most productive.—Journal of Horticulture.

PERSONAL.—Robert Kennicott, son of Doctor Kennicott, of "The Grove," and an eminent naturalist, who is traveling in the northern British Possessions, collecting specimens for the Smithsonian Institute and the Audubon Club of this city, has been heard from at Fort Anderson, far within the Polar Arc, under date of July, 1861. He purposes visiting the Arctic Coast in July, and then starting for home the first of August, reaching here in December. Every facility has been extended to him by the British Government to prosecute his researches, in which he has been eminently successful.—Chicago Tribune.

HOW TO PICK STRAWBERRIES.—The editor of the Horticulturist objects to the usual method of picking strawberries. He says that in taking off the stems and calyx the berries are much bruised and their appearance injured. In all large berries he would have placed on the table with the calyx and a portion of the stem remaining. In marketing, berries thus picked will sell much better, as they do not injure so much from transportation. He also hopes to see the day when "strawberries will be grown with such a happy combination of flavor and sweetness, that no auxilliary in the form of sugar will be needed to render them palatable." Amen.



[For the Illinois Farmer.]

### Vermin on Cattle.

DEAR FARMER:—I see you have inserted in the April number of the FARMER, an article on the above, taken from the *N. E. Farmer*, in which is given a number of remedies which are most, if not all, good; but he failed to give what I call the most important and simple remedy. The writer speaks of any clean oil, well rubbed in, on different parts of the animal, as being good; I coincide with him in that. He further says—"The reason for covering so much surface of the creature with oil or grease is that lice do not breathe through the mouth, but through breathing holes or pores in the body, and when they come in contact with oily substances, these pores are stopped and the lice die." Pretty good; they die, and their death is what we are after—the *modus operandi* we care less about.

Some twenty-five years ago I had a cow—among many others—that got very poor in mid winter, and on good feed. I increased her feed, but 't was no go. I caught the cow to make an examination, and to my surprise found thousands upon thousands of the real, blue devils, stowed away in comfortable quarters on different parts of the animal, but more especially about the nose, they were stowed for a hand's breadth from the naked skin of the nose, upwards among the scattering hairs so thick that they could not lie down, but had to stand on their heads, and there was not room for another louse. I asked myself what in the world sends so many of these blue scamps to the nose of the cow? (Now, I believe the theory is correct, that neat cattle, and even horses, do not perspire—unless driven or warmed—on the body, except an admixture of an oily matter just enough to keep the hair in good condition, but about the nose will stand large drops as limpid as the running stream.) I came to the conclusion that the lice went there to drink, and as laughable as that may appear, I acted upon that hypothesis, and now for the remedy: I concluded to take them by strategem, the same as I would a rebel fort—cut off their supply of water. I took common lard—any good grease would do—and rubbed it all around the neck of the animal the width of my hand, and to get rid of them on the nose, I took them by storm, just by rubbing a little lard around the nose. In about one week from that time I examined again and found but very few lice; rubbed a little more lard on the neck, and in ten days more every louse had evacuated, and since that time I have

treated them in the same manner when I found them on my cattle, and always with good success. Some that have tried it say it fails sometimes, but that is for the want of a thorough application. In the case of a colt, the main sometimes allows them to pass over unless reached and well greased. The application should be repeated once or twice, so that the nits that may hatch will meet with the same fate. Any one that tries the remedy thoroughly, will find it good.

Yours truly,

M. GREMMAN.

Tishburn, May 10, 1862.

—There can be no question as to the value of Dr. Gremman's remedy and the reasons therefor. We have done the same thing when a boy, and found it effective, not on colts, it is true, but on young cattle. The practice of putting a small cord around the neck of animals saturated with angintum is upon the hypothesis that lice go to the nose and eyes of the animal to drink.

Many of our readers will thank the Doctor for his plain and simple direction, as well as the reason why there is an occasional failure for want of a second application. Ed.

### Recipe for Making Rhubarb Wine.

A correspondent of the Bucks County *Intelligencer*, gives the following recipe for making "American Champagne," or wine from the stalks of the rhubarb or pie plant:

Cut the rhubarb into small pieces, put it into just enough water to keep it from burning, boil until quite tender, strain through a coarse cloth. To one gallon of this liquid, add two gallons of water; to each gallon thus made, put four pounds of sugar, ferment in an open vessel forty-eight hours, then take off the scum, and add one pint of best brandy to every four gallons, after which put it into an air tight cask; then let it remain six months undisturbed when it will be ready for bottling. In each bottle put one raisin, and seal the bottle well.

[From the Chicago Tribune.]

### Fine Wheat and Rye.

R. B. Stone, Route Agent upon the Illinois Central Railway, has furnished us with some wheat from the field of W. L. Pierce, Centralia, Marion county, and some rye from the farm of T. J. Johnson, of the same place. The stalks are fully five feet and a half in height, the heads full and plump and promise a splendid harvest. If these are fair representations of the crop down in Egypt we may predict a season of unusual plenty.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, JUNE, 1862.

### Editor's Table.

The spring has been very backward, what with heavy rains, short help and a general indisposition to plant largely, a less breadth of sowing and planting has been done, than for many years previous. Nothing is being pushed, the farmers are taking things philosophically and we think rationally, they are not likely to be overburdened with work at any time during the season. Hands are scarce, but as the demand for them is limited, no great inconvenience results. Corn comes up remarkably well, especially when the ground has been rolled, the spring grains promise well, as do also winter wheat and rye. The fruit crop was never more promising than at present. In our own grounds, apricots, nectarines, peaches, hard shell and almonds, are loaded with fruit; the same may be said of apples, while pears did not bloom quite as profusely, but they have a fair show of fruit. Strawberries, gooseberries, currants, raspberries and blackberries are full. Our Lawtons, sheltered from the wind but not otherwise protected, are very full. The Purple Cane and Black Cap are in the same condition of fruitage—part of the latter were fully exposed, but have come out all right. We have about an acre of each now planted for field culture; the plants are set four by six feet apart, the rows being six and the plants in them four feet. We cannot too highly commend these two varieties of our native small fruits, hardy, easy of culture and profuse bearers of most desirable fruit; they should be in every garden.

**CULTIVATION OF THE SUGAR BEET.**—Several parties at Loda, Iroquois county, are making the experiment of growing the beet for sugar. The seed has been imported from France for this purpose by Messrs. Belcher & Co., sugar refiners of Chicago, who propose to work up the beets on shares, the grower paying freight to Chicago. We have no confidence in the success of this experiment from the fact that our soil is so strongly charged with the nitrates, which injure the beet root for sugar. It is possible that after taking off some half a dozen crops of the beet from the same ground that the nitrates will be so far reduced that the crop may prove profitable. With a soil so well adapted to the sorghum we have no idea that the beet root will make any headway as a competitor. That the root will prove profitable to feed milch cows and other stock we have no doubt, when barns and sheds are used for shelter.

**PRICE OF CORN.**—In New York corn is worth fifty-two cents, while in Chicago it is about thirty cents, leaving a margin for freights, commission, insurance and storage of about twenty cents. This will not be materially reduced, and any advance in Chicago will depend on that in New York. The usual price of corn in New York is from sixty to seventy cents. Should the Mississippi river be opened for business, it is probable that the demand for corn would advance the price along the lines of railroad connecting with Cairo and St. Louis.

**THE PEACH GRUB.**—Mr. Chatton, the extensive orchardist at Payson, ten miles from Quincy, says that hog manure, coal ashes or tobacco stems will effectually keep away the peach grub. He purchases tobacco stems by the wagon load at the "stemeries," and applies them in the spring to the collars of the peach trees; hog manure and coal ashes are applied in the same way. It is not too late to try the experiment, as the eggs are not laid until this month.

**THE STRAWBERRY CROP IN EGYPT.**—We have a letter from Dongola, saying that the strawberry crop will be light on account of the dry weather. Willson's Albany is the kind planted. We have little faith in planting this fruit on high land, as done in most cases. This fruit delights in a deep moist soil and is impatient of drouth. Something is yet to be learned of this fruit; last year's success is not quite conclusive on all points. With us the crop is very promising.

**THRESHING MACHINES**—The card of Messrs. Wheeler, Melick & Co. will be found in our advertising department. Among the manufacturers of railway power threshing machines, they stand a head and shoulders above the crowd. Being the original inventors of this cheap, durable and efficient power, they have abated no effort at improvement either in mode or material. This machine requires few hands and but a single span of horses to turn out several hundred bushels of winnowed grain per day. The horse power is convenient for wood-sawing, churning and similar work. To those who wish, the editor of this paper will forward their orders without charge or answer any enquiries in relation to them.

**STEAM PLOWING POSTPONED.**—We have a letter from Mr. R. W. Eddison, agent of Fowler's steam plow, dated Leeds, England, April 17th, in which he says, in consequence of the disturbed state of this country the trial of this plow will be postponed until a more favorable opportunity. This is a wise move, as the war swallows everything, whether of interest or not, and but little attention would be given to it at the present time.

**SORGHUM**—Almost every farmer is planting more or less sorghum, and in some cases large lots of it are put in. We shall expect to see the price run low in consequence of the supply and competition with that from the south, for we are now sure of having the Mississippi open before the current crops harvested. Cobs make an excellent fuel for the evaporators, and farmers should carefully house every cob that is shelled.

**TWO-HORSE CULTIVATORS.**—Those who have large fields of corn to cultivate would do well to use these valuable implements. Several patterns are all of them more or less valuable. We have not seen any of the new Turner Cultivators from Jacksonville, but doubt not they are among the best. The corn growers about Jacksonville are among the best in the State and know what implement is the best to work the crop.

**PLANTING CORN IN ROWS.**—We have planted our corn in rows one way, following the plowing almost daily, planted shallow and rolled, and the result is a most perfect stand, with the ground in most excellent order, there are no lumps of earth to roll on the hills in cultivating, and with the two-horse cultivator corn culture will be an easy and rapid work.

**OFFICERS OF THE MADISON COUNTY AGRICULTURAL SOCIETY.—**

President, Wm. B. Hundley, Dorsey.  
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 Jacob J. Kinder, Edwardsville.  
 John Weaver, Omphgent.  
 Executive Board, J. J. Kinder, Edwardsville.  
 Geo. S. Rice, do  
 W. C. Flagg, Moro.

**RED CEDAR SEEDLINGS.**—We have received of J. A. Carpenter, of South Pass, 5,000 of the above. They are good plants and put up apparently in good order—the heavy rains thus far have prevented us from setting them out. These cedars are grown about the base of the sandstone ranges within a few miles of the station. They are furnished at such a cheap rate that our farmers can afford to make a liberal use of them for screens.

**SWEET POTATOES**—These should now be planted. Make the ridges large, as on this depends the value of the crop; set the plants singly fifteen inches apart; if the weather is very dry, water; do not plant if the ground is very wet or weather rainy, as the plants will not do so well as when moderately moist, cloudy weather is desirable at the time of planting.

**THE GARDEN**—This is the month in which to look after the weeds in the garden. Do not allow yourself to neglect the garden this month, or you will come short of vegetables.

**PRICE OF WOOL.**—We doubt if there will be much, if any change in the price of this staple for some time to come; we certainly should not hold it for an advance.

—If the doctor orders bark, has not the patient a perfect right to growl.

## How far can Crows Count?

A correspondent of the Plattsburgh Republican in discussing this question, narrates the following incident which goes far to answer it:

A few years since we were riding in a stage-coach with several gentlemen, when the conversation turned on the subject of crows and many interesting anecdotes were related. One gentleman said he knew that crows could count—at least as far as three—for he had often proved it. Being troubled with crows in his field, he had often attempted to shoot them. But they knew what a gun was as well he did, and therefore kept out of his reach. He then concluded to put up a small booth in the field, and place some carrion—a dead horse—within gun-shot. From this place he supposed he could fire at them when they alighted to eat. Whenever he entered the booth the crows would all sit on the distant trees, and not one would come near till he was gone. Then all would alight except the sentinel who remained to give warning if danger approached.

The gentleman, finding that plan to fail, thought he would deceive them. So he took his son with him to the booth, concluding that when they saw one go away, the crows would think the coast was clear, and descend to the bait. But when the son left the booth, a crow sung out caw, caw, caw. (there goes one) but not a crow would leave his place.

The next day the gentleman took two persons with him to the booth and then let them depart one at a time. The crows on the trees saw the first and cried out, "there goes one," in their peculiar dialect. Then when the other went they cried "there goes two;" but they would not alight for they counted three when they entered.

The day following the gentleman took three others with him. When they went out one by one, the crows cried "there goes one"—"there goes two"—"there goes three." And when these men were out of sight they all alighted, and the gun of the fourth man did its work.

The gentleman stated that this thing had been tried repeatedly, and it was evident that crows could count as far as three, but there their arithmetic ended. When they will ascend to the higher branch of mathematics is yet to be ascertained. In the meantime others can bring on their incidents of crow nology.

## A THOUSAND PLOW PATENTS.—The New York World says:

"It may surprise many of the multitude who use plows, as well as those who do not, to learn that about a thousand patents have been issued for alleged improvements in plowing since the foundation of the American government. About two-thirds of these patents have been granted since the year 1847. Some curious investigator will doubtless mount this hobby, and give us a book about the origin and progress of the implement which the farming world is now trying to discard—if it can find anything better to use in cultivating the soil."

None of the cultivated grain plants have been found growing in a state of nature. It is a remarkable fact that neither oats, barley, wheat, nor rye are ever found in any country growing wild; no migrating nation possesses them; their existence marks the tiller of the soil, and although they should be found in the midst of solitude and silence, yet man has been a settler there.

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### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

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**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


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may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin *now*, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

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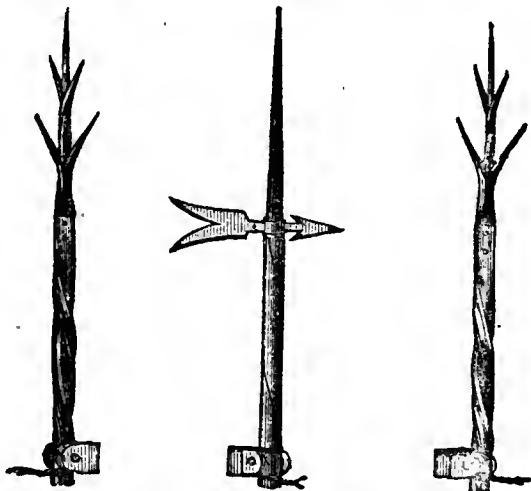
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, JULY, 1862.

NO. 10.

## July.

July, with its ardent heat, will soon be at hand; yes, fully inaugurated when this number of the FARMER reaches its readers; but as we write, we have the milder days of June, of genial, rosey June; over which is wafted the first zephyrs that come up from the isles of the gulf, laden with the wealth of summer growth, to fruit, to flower, and to the waving grain. All the month the busy horse, with cultivator, shovel-plow, or other implement, is destroying the weeds that line the rows of the young corn—it is a busy month, but its pathway is strewn with the beautiful, and labor, under such skies, and amid the teeming ranks of our varied products, is but a pleasure. Who would not be a farmer to lord it over rich acres of prairie drift? who would not wish to own an orchard bending with the gifts of promise? who not wish for a garden filled with ripe strawberries and the other small fruits?—let him who has plodded long years on a farm without an eye to the beautiful, answer not me—for no other person but will respond with an eye.

Would that we could imbue into every tiller of the soil, a more thorough system of improvement, that while his energies are devoted to bushels of grain that pay his annual expenses, he would place about him more home attractions, more of the comforts of life, more of the elements of endurance, of good health and what is of value—contentment.

Seldom it is that we see for sale a farm with good buildings, good orchards, a well stocked garden, and shady walks about the

house. Such places have too many attractions for their owners to be parted with for any trifling consideration. Farming is an art, a trade that requires no small amount of study and of training to succeed well. The dolt can plow and gather in his crop, but he plants by guess and regulates his business by accident, while the intelligent farmer builds up a home around which loved ones delight to linger, and from which they seldom stray, for it is there they find the comforts and pleasures of home.

With good health and pleasant surroundings, labor is a pleasure: and the sweat poured out in the field, with well directed efforts, is an instrument that will return many fold; but to plod on, to dig and delve to no particular purpose, is a constant wearing away of the system and a souring of the genial sympathies of our kind. The farmer must use more brains; he must work less with his hands, see more with his eyes, and study more intimately into the arena of nature. If he but wills it his pathway can always be strewn with the beautiful, and the useful be at his command. We all work much; we are too much hewers of wood and drawers of water; too much the dupes of designing men who live upon our labor. Count up, if you will, the thousands of dollars of our hard earned labor that have been thrown away on worse than worthless seed, of new plants, of worthless implements, patent washing machines, churns, with thousands of humbugs that we have gulped down with a credulity that is astonishing. We must use more brains and not longer furnish the food for this class of harpies. We must



look well to what we purchase, what we plant and how we cultivate.

### Mattoon and its Surroundings.

Mattoon is located at the crossing of the Chicago branch of the Illinois Central, with the Terre Haute and Alton Railroad, and within a dozen miles of the southern Illinois. Its elevation above the Ohio at Cairo, is 460 feet, and consequently is near the northern rim of the basin of Upper Egypt. Located at a high elevation above the basin, it forms the south border of the water shed of Central Illinois. The clouds that float for nearly a hundred and fifty miles over the basin, pour out their favors on the deep, rich loams of this plateau, and thus make it one of the most fertile parts of the State, with a remarkable exemption from drouth. This section has long been noted for good crops of wheat and most abundant ones of corn. The country is rolling, well watered, and with a very good supply of timber. Coles county, of which this vicinity forms a part, is one of the richest counties in the State.

The best field of wheat that we have seen this season is on the farm of the Messrs. Page, Herkimer & Bro. It is a field of 180 acres, and at the time of our visit, May 26, was fully headed out, and presented an even surface. The seed was from Michigan and is the Red Mediterranean. We doubt if there is another field of the same number of acres in the State that will yield as much as this, if no casualty occurs to it.

The farm contains 720 acres, or a section and one-eighth, is slightly rolling, and located a mile and a half northwest of the village. Nature planted a small grove of about five acres, which makes a conspicuous mark in the landscape, and island gem in the sea of verdure, that, until last year, waved in all the grandeur of its aboriginal freedom.

The wheat mentioned above was sown on the prairie broken up last June and July; the sowing commenced the last of August and closed near the middle of September.

The early sowing was by drilling, but prairie is not the best adapted to drilling, and the remainder was sown by hand broadcast. We can see no difference in the part drilled and that sown broadcast. This prairie had been pastured by large herds of cattle, and was in the best condition for breaking up. At the time of sowing the soil was well rotted and having been thoroughly harrowed the wheat made a good growth in the fall, but not so as to injure it by smothering out. It is evident to our mind that this neighborhood is well adapted to the growth of winter wheat, if sown on a clover sward. Thus clover, to be mown, and the stubble turned under in August, and sown if not to be pastured, during the first half of September. In February, or the first of March, seed with clover, this will make good autumn feed for stock—mow the next season and treat as before. This will make a two course rotation that, we think, will pay better than any other at the present price of other farm products. After a few years if the crop should fall off, add to the clover a portion of herds grass—top-dress after cutting the clover and continue in grass another year. Another plan would be to alternate with corn: have the corn follow the wheat, and follow this with spring wheat sown on the corn stubble the corn being cut low for this purpose, and headed off during the winter. In this case very early sowing will be required, say the last of February and not later than the tenth of March. The failure of spring wheat in this part of the State is generally caused by late sowing—it must have a start during the spring rains, and be headed out before the long hot days of June. We would especially call the attention of farmers along the front edge of this water shed to the value of winter wheat and clover. It is probable that oats would follow wheat to good advantage, but this would have to be followed with corn and again with wheat, as it would be difficult to seed down with oats unless they were sown too thin for a heavy crop. After all, a rotation of crops must, to a great

extent, depend upon the market. At the present price, corn and oats are of less value than wheat and clover, especially on a farm like the one under consideration, moderately rolling, a part only adopted to wheat and the remainder to pasturage, they being admirably adapted to a mixed husbandry.

Nature has made a rule on all the prairie slopes to plant her forests on the east side of water courses, ponds, sloughs, or small lakes; in this case we have a miniature lake about half the size of the grove, thus affording to bird and beast shelter from the sun, and a supply of water at all times, the two combined affording irresistible attractions, but now the cattle are debarred the ground and the birds have it nearly all to themselves. A dozen gray squirrels caught when young, have become domesticated and come down from the trees to feed from your hand. Their pleasant chatter adds no small attraction to the ground.

It is astonishing what beauty and value a small grove like this adds to the surroundings of the homestead. A year ago and there was no home; the wild uncultivated prairie and this waif of trees; the home was nestled under its margin, and its leafy aisles became trodden by intelligent men; under its leafy canopy the plans for further progress were laid; long furrows wrote out from it, and line after line of fence carved the landscape into fields that now teem with luxurious crops. It was the grove that attracted its present owners to the adjacent acres and tempted their purchase.

Its bounds will be enlarged and the fields belted in with forest verdure, beautifying the landscape and shutting out the bad effect of the sudden changes of climate that would sweep over the fields. When will farmers learn to plant trees? when will they double the intrinsic value of their farms by a small outlay in this direction? Echo, as yet, answers when. But we think the time cannot be long delayed and thousands of homes be made redolent with rural beauty.

Near the west part of the village is a large

orchard, some three years set out, but the apple trees have been raised with the knife, and it can never be made valuable; trees like Lombardy Poplars, with heads from four to six feet high, will never answer for prairie orchards. This orchard is set with rows two rods apart and a row of peach trees between each. The peach trees are large and well grown, but have no fruit on them. The owner resides in the village, but we did not call on him. We should have advised him to saw off his trees to within two feet of the ground next spring, but to this he would never consent, and as we have no other remedy to propose for his benefit, it was useless to waste any time over it. We could have spent two or three days more in visiting farms in the vicinity, profitably both to ourself and readers, but a day from home was the most that could be spared and we took the night train home after making the discovery that the spell that bound Mattoon and cursed its progress with miserable hotels was broken by mine host of the Essex House. Mattoon has a bright future before her. Nothing like a good hotel in such a place, where the seekers of a new home can be made comfortable while selecting a location. To this we can add a good local newspaper, alive to the interest of its patrons, like the Mattoon Gazette.

### Low Headed Trees.

We are in receipt of numerous inquiries in regard to the treatment of low headed trees, and how to reduce the long legged kinds to this condition. The first season trees are set and in leaf, it is inadmissible to take off any of the leaves, not even the suckers should be removed. Therefore you must wait until the season's growth is completed before proceeding to cut down the high tops. Trees, if two inches in diameter at the base, can be sawed off and the wound covered with white lead or other varnish to keep it sound, when the spring growth will push out new buds that will rapidly grow into branch-

es. Orchards that have been set the past spring, can be cut back say within two feet of the ground, after the first hard frosts in October. This we consider the best time to prune for wood. The growth is then comparatively complete for the season, and the wound hardens at the surface and will head over sound, whereas in the spring the sap flows out and if the wound becomes shaded, it will sour and the result will be a rotten spot in the tree.

We have often reverted to the fact that newly set trees should not be disturbed by cutting off branches and sprouts through the summer. We always dread the man who whips out his knife on every occasion, and cuts and slashes as he goes. All newly set trees should be encouraged to make roots the first season, and to become fully established; to enable them to do this, the growth of leaves should be encouraged, and it matters not in this respect whether the leaves are near the base or at the apex, it is their number and vigor that send back to the roots the elements for their extension. In this connection we should not forget that at the time of transplanting, that the tree should undergo a severe heading back, but this must be done before the leaves are developed; after that, they must be let alone. Nineteen out of twenty persons who set out trees, injure them more or less by rubbing off buds, cutting out suckers, and in *forming the tops*. Keep off your knife until the season's growth is complete, when you can take off all superfluous growth and thin out the branches to suit your taste, after that you can rub off all water sprouts as they appear.

July is generally a hard month on newly set trees; if they are found lagging at this time the only way to save them is to treat them to a thorough soaking of the roots and a heavy mulch of well rotted manure, straw or corn stalks, but we prefer the manure. One good wetting of the roots, followed with the mulch, will, in most cases, be sufficient. We have found corn stalks a valuable mulch,

in many respects superior to straw or other litter. One advantage is that it remains in place, is not filled with the seeds of weeds, and in the decay materially enriches the soil. It is, without doubt, the most valuable for currants, goosberries, raspberries and grapes of any substances yet used, and we would advise every farmer to provide more or less of them for this purpose. We find that the ground under the cornstalks is more loose and moist than under hay or straw, and that we get a better growth. It is surprising what a thin coating of stalks will have in keeping down the weeds.

In our orchard, among the shanghai trees, we have allowed the suckers to have their own way for the present, so as to shade the trunks; this, we know, is not the proper way to have the orchard look tidy, but as we grow older we grow more miserly about our fruits and stand less on good looks than on full crops. If we leave our apple tree heads into the ground, it does not follow that trees with drooping or spreading heads, like the May cherry, need not be so low, and these we work about two feet from the ground, while in the nursery the apples have their branches a foot from the surface. The plum and pear cannot well be too low, while we like to see the peach with a clear stem a foot high to enable us to get at the grubs.

It is generally admitted that fruit growing on the prairies has not been over and above successful. The fault is not in the soil, for we have a most excellent one for the growth of the trees, but in the sudden changes of weather incident to our continental condition. If we have failed it is because we have followed a practice suited to a maritime climate and well sheltered locations, instead of to the dry hot summer months, and sudden changes or heat and cold that we must contend with. If fruits thrive better with shelter, need we withhold it? If the roots do better in a moist, shaded soil, is it good policy to expose the surface to the fierce rays of the sun, to drink up the moisture and parch up all the ele-

ments of growth? We think not. We have proved the old system not well adapted to our soil and climate, and it is our duty to investigate the facts, and see if we cannot devise a system that will give us at least a better prospect of success. With the low heads we have protection from high winds, and at the same time shade for the ground so as to retain the moisture so much needed to a full development of both trees and fruit. We have full faith in the prairies for fruit when a rational system of culture is adopted and some care had in the selection of varieties. We have passed through the old system but to meet with bitter disappointment as our orchards at Leyden have proved. In commencing anew in Central Illinois, 130 miles, or two degrees of latitude further south, we relied more on climate than culture, and started on the same system but to meet with another disappointment, but our eyes are open and we are afloat upon a sea of experiment evolving new facts, that we hope will lead us to success. We are not satisfied with our effort here, yet we will challenge any orchard of similar extract and age to show better results. Our oldest trees are in the fifth year of their growth in orchard, and are well filled with fruit, most of this is due to a proper selection of varieties, to this we will add shelter and low heads, and we shall be disappointed if the next three years do not show better results than the past four have done.

#### August Sown Wheat.

Last year, as our readers will recollect, we sowed several acres of winter wheat in August, with the view of pasturing. We are not fully satisfied with the trial, nor are we willing to give it up as a failure. In the first place the seed was threshed in a new machine and badly cut up which damaged it very seriously for seed. This is so common an occurrence, that we see no way but to resort to the old fashioned flail to beat out

our seed wheat by single blows as of old. In the next place it was sown too thin for even the best of seed, sixteen bushels on fourteen acres, when two bushels to the acre with such seed would have been little enough. In the last place it was pastured too severely by cattle, colts and calves, that is rather too late, as after the heavy rains it was somewhat tramped up. The early pasturing and tramping, when the ground was in good condition, appeared to benefit it. The crop is very thin on the ground, as a matter of course, and will be somewhat weedy, but it is free from chess, the tramping had no effect on it in that direction, though we would remark we cleaned over a bushel of chess out of the seed. Winter wheat was much thinned by the March weather in this section of the State, and as a general thing, or as usual, *has turned to chess!!!* Why this perverse disposition attends our neighbor's wheat and not ours, can only be accounted for in the use of Goodrich's fanning mill, that takes all the chess out of the wheat, and as there is no samples left, the poor ignorant wheat don't know how to form chess stools without them.

Farmers who will sow direct from the threshing machine can expect no other result than to have a large share of their wheat *turn to chess!!*

On the whole we do not think our crop of wheat will fall much, is any, below that of our neighbors. Had plenty of seed been used the result would have been more favorable. To guard against this we shall bring into use the old hand flail, whose memory comes down to us from boyhood with no pleasing emotions, for there, day by day, we listened to its measured music as blow by blow it beat out the rattling grain, but with it we will have the assurance of a good stand of grain.

A field of several hundred acres sown at the same time, and which was not pastured, made a large growth, but was badly winter killed. After harvest we shall have more to say on this subject.

With this treatment, winter rye is a most triumphant success and we recommend it without hesitation, even sown early in July. We have two acres sown the twentieth day of August—one and a half bushels to the acre of seed, which is now all we could ask. It stands even as if shaved, with long, well filled heads. Last fall it furnished a large amount of pasturage. Farmers who are short of autumn pasturage should not fail to sow rye.

One of our neighbors seeded a number of acres among his standing corn, and says the practice is a bad one, the corn shading the rye it grows spindling and of little value for feed. He attempted to pasture it in the spring, but the cattle seriously damaged his ground by stamping it up during the heavy spring rains. He is down on the practice, and well he may be, or any other farmer who allows his stock to run out on plowed ground in the spring.

### Sowing Wheat Among Corn.

Sowing wheat among corn, after several years of trial, has not given very good satisfaction. We have never given it a personal trial, but have watched the practice with some solicitude, and have endeavored to detect, if possible, the fault if fault there was. There is a difficulty in sowing and harvesting, but this is now pretty well remedied by the use of Prof. Turner's one-horse drill, which sows two drills at a time, and by passing twice through the rows the land is very well seeded. In the next place the shade produced by the rank corn gives the plant but a sickly growth, and when winter sets in it is too feeble to stand the severity of the freezings and thawings that follow. To remedy this we would recommend that the corn be husked as early in the fall as possible, and at once cut the stalks down even with the surface, and scatter them over the young grain as soon as possible, and the roller over them so as to press them near the soil. This would let in the sun and air so

as to induce a good growth before winter sets in, the plant would become well rooted and the stalks would give it a good winter protection. Corn stalks make the best possible mulch, keeping the surface moist, but they should lie close to the ground so as not to shade the young plants. Winter wheat cannot endure shade, and therefore the corn should be cut down early in the season as possible. Let a man follow the huskers with a cutting knife or a sharp hoe, remember no high stubs are to be left in the way of the reaper, or to hold up the fallen stalks. In a few days the leaves of the corn will be nearly decayed, and give the young wheat the benefit of a top-dressing. So far as we are aware the above is but a theory, never having seen or heard of a trial of it, it being the universal custom to let the stalks stand until the latter part of winter, when they are cut and scattered over the surface, and at harvest time are much in the way. By the plan proposed, the stalks would be well rotted and thus add to the growth of the wheat; in rich ground, it might tend to lodge the grain by a too vigorous growth. We think stalks thus treated must have the effect to prevent winter killing. It is well known that a light coating of straw in the autumn on winter wheat has a wonderful effect to prevent heaving out, and we can see no reason why corn stalks would not have the same effect.

We are sanguine in the belief that the experiment is worth the trial, and should it succeed will add thousands of dollars to the value of each corn growing county in the State, and besides would give us a first class rotation. We must grow even and this would give us a rotation with one for corn. That is wheat after clover, to follow with corn and wheat sown with this, seed with clover in the spring, mow or pasture the next season until August, and again sow to wheat.

But it is not settled that clover can be successfully grown in the basin of Egypt; of this fact we are not quite certain, should



it prove so, however, herds grass would answer a good purpose and would turn off a good crop of hay. In Northern and Central Illinois clover is grown without any difficulty, and will be found more valuable than the herds grass.

As our Sangamon and Morgan county farmers have had more experience in growing wheat among corn than in any other part of the State we hope to hear from some of them on the subject.

From the Dixon Telegraph.

### Reaper Trial.

The trial of reapers, headers, mowers, and grainbinders to take place near this city some time during the next harvest, bids fair to be one of the most interesting movements yet made by the State Agricultural Society. Its executive officers, headed by President Van Epps and its excellent Secretary, John P. Reynolds, are making commendable exertions to make of the trial an exhibition of substantial benefit to the farmers of the locality, as well as to the manufacturers of farming implements generally in the State. Entries have already been made sufficient to ensure the exhibition, and it is expected that other valuable farm implements than those named will be on trial, and premiums awarded in amount proportionate to the value of the articles to our agriculturalists. It is expected that many agriculturalists, mechanics, manufacturers of farming and other implements, as well as officers of the Society, will be in attendance during the trial which may last many days, and that our citizens will exert themselves in kind offices, and make their stay one of pleasure to them, and that a favorable impression will be left on their minds of the character of the place, its citizens, water-power and prospects generally.

—We have no question that the above trial will prove an interesting one, and will draw no small amount of mechanical talent. Dixon is located in the center of a fine farming country, which is generally well improved. The farmers are intelligent and energetic, and they will not let this occasion pass without making it available. Dixon is approached from all directions by rail, and we shall expect to see all parts of the State represented at the trial. Ed.

In England and America grain is generally rated by the bushel, though it is not the same measure; for here we use the Winchester bushel, which contains 2,160 42-100 cubic inches. There, since 1826, the legal measure is called the imperial bushel, which contains 2,218 cubic inches; so that 32 of their bushels are about equal to 33 of ours.

### The Contented Farmer.

[Translated by Bayard Taylor into "common English," from the American German dialect of John Peter Hebel, for the Atlantic Monthly.]

I guess I'll take my ponch and fill  
My pipe just once—yes, that I will!  
Turn out my plow and home'ards go;  
Buck thinks enough's been done, I know.

Why, when the Emperor's council's done,  
And he can hunt, and have his fun,  
He stops, I guess, at any tree,  
And fills his pipe as well as me.

But smokin' does him little good;  
He can't have all things as he would,  
His crown's a precious weight at that;  
It isn't like my old straw hat.

He gits a deal o' tin, no doubt,  
But all the more he pays it out,  
And everywhere's they beg and cry  
Heeps more than he can satisfy.

And when, to see that nothing's wrong,  
He pleagues hisself the whole day long,  
And thinks, "I guess I've fixed it now,"  
Nobody thanks him, anyhow.

And so, when in his bloody clo'es  
The Ginerall out o' battle goes,  
He takes his pouch, too, I'll agree,  
And fills his pipe as well as me.

But in the wild and dreadful fight,  
His pipe don't taste exactly right;  
He's galloped here and galloped there,  
And things aint pleasant anywhere.

And sich a cursin': "Thunder!" "Hell!"  
And "Devil!" (worse nor I can tell);  
His grennadiers in blood lay down,  
And yonder smokes a burnin' town.

And when a travelin' to the fairs,  
The merchant goes with all his wares,  
He takes a pouch o' the best, I guess,  
And fills and smokes his pipe, no less.

Poor devil 'tisn't good for you,  
With all y'r gold, you've trouble, too,  
Twice two is four, if stocks'll rise;  
I see the figures in your eyes.

It's hurry, worry, tare and fret,  
Ye ha'nt had enough the more ye get—  
And couldn't use it if ye had;  
No wonder that y'r pipe tastes bad.

But good, thank God! and wholesome mine,  
The bottom wheat is growin' fine,  
And God, o' mornin's sends the dew,  
And sends his breath o' blessin', too.

And, home, there's Nancy, bustin' round;  
The supper's ready, I'll be bound,  
And youngsters waitin'. Lord, I vow  
I dunno which is smartest, now.

My pipe tastes good; the reason's plain;  
(I guess I'll fill it once again;)  
With cheerful heart and jolly mood,  
And gain' home, all things is good.

From the Chicago Tribune.

**The Farm and Garden.**

*Cultivation of Corn—Old vs. New Mode of Planting and Cultivating—Iron Rollers—New Planters Needed.*

CHAMPAIGN, ILLS., June 2, 1862.

There can be no doubt that corn will ever continue the great leading crop of the prairies. No other grain of the same value for feed can be grown, at so cheap a rate and harvested at so convenient a season, nor secured from the weather for so long a time, at so little cost. Whatever will tend to lessen the cost of production, will therefore prove advantageous, and the corn crop at the reduction of one or two cents on the bushel will in the aggregate amount to several hundred thousand dollars per annum. We have, on previous occasion, discussed this matter, but it will do no harm to give it another hearing just now, when the subject of planting is fresh in the minds of every farmer.

The first point of importance where a saving can be made is in the planting. The most popular mode at present is to use a check-row planter, and as Brown's planter is the principal one used for this purpose, we will base our calculation upon that.

**COST OF PREPARING AND PLANTING FIFTY ACRES.**

Plowing 50 acres at \$1.....	\$50 00
4 days harrowing at \$2.....	8 00
2 days laying off one way.....	4 00
3 days planting, 2 hands, at \$3.....	9 00
4 days rolling.....	8 00
	<b>\$79 00</b>

Total cost per acre, \$1 58, or an average of five and a half cents a bushel on a crop of thirty bushels, which is about the average of well cultivated crops.

**COST OF SAME WITH HAND PLANTERS.**

Plowing.....	\$50 00
4 days harrowing.....	8 00
4 days laying off both ways.....	8 00
6 days planting, 1 hand.....	6 00
4 days rolling.....	8 00
	<b>\$80 00</b>

Against the hand planter one dollar, but this can readily be set off against the difference in cost of planters. On the other hand the team can be made to do part of the work. Two hands with hand planters will plant as much as two, with a two horse planter, which require two men. In one case the land is laid off one way, and in the other both ways.

**COST OF THE SAME BY HAND.**

Plowing.....	\$50 00
2 days laying off one way.....	4 00
6 days dropping.....	6 00
6 days harrowing.....	12 00
4 days rolling.....	8 00
	<b>\$80 00</b>

**THE SAME NOT CHECK-ROWED.**

Plowing.....	\$50 00
3 days planting, one hand and team.....	6 00
4 days rolling.....	8 00
	<b>\$64 00</b>

A saving of fifteen to sixteen dollars, or about one cent on the bushel. We are satisfied that a still greater reduction can be made. The roller that we use has six sections, of thirteen inches each, making six feet and a half. Add another section and we have seven and a half feet, the width of two rows. Now attach the planting apparatus to the roller frame, just in front of the roller, and the planting and rolling can be done at the same time.

Plowing.....	\$50 00
4 days rolling and planting.....	8 00
	<b>\$58 00</b>

Making a saving of six, twenty-one, and twenty-two dollars an acre over the above plans.

**COST PER ACRE OF EACH PLAN.**

1st plan at \$1 58 per acre.....	\$15 80
2d plan at \$1 60 per acre.....	16 00
3d plan at \$1 60 per acre.....	16 00
4th plan at \$1 28 per acre.....	12 80
5th plan at \$1 16 per acre.....	11 60

**WHICH MODE IS THE BEST.**

We say without any hesitation that the fifth method is the best, the fourth next, and the check-rowing the least valuable, though most expensive of all.

Many farmers, in fact the majority, dispense with the use of the roller, while a few use iron rollers, and others those made of wood. We have seen but one good pattern of an iron roller. Those made in Chicago and Boston are expensive heavy, clumsy things, perfect horse killers, and none of them are worth the freight from Chicago to this place. We would not haul one of them from the depot to our farm for it, for the only use we could put them to would be the frame for firewood, and the iron for old junk. The reason that iron rollers have not more generally come into use, is the fault of the makers in part. The party making the one we have used for the past three years, has, we understand, gone into other business, and we are not aware that they are now to be had, but others can be made after the same pattern. The point of manufacture selected was a bad one. Had Chicago been selected a different result would have been reached. Thus much injustice to the form of the iron roller, which has been the main cause of its slow introduction among corn-growers.

**THE PLANTER SHOULD FOLLOW THE PLOW.**

A roller of seven and a half feet with planter attached would plant at least sixteen acres a day or fifty acres in three days, with one team and hand to drive. Eight other teams would do the plowing, thus with nine teams one hundred acres of corn can be planted in a week, in the best possible manner; or one team, could with an hour at the close of the day, plant what had been

plowed, the depositing the seed in freshly plowed soil, and before the clods have become dry and are the most easily crushed, two very important points. In the first place the corn will be up before the weeds, and in the second, the soil will be thoroughly pulverized and the surface left smooth for the cultivator. We venture to say that the advantage of this is not less on the average than five bushels additional yield to the acre. We know from actual test that one rolling following the plow, will do more to pulverize the soil than three times the amount of harrowing, in fact we do not think of using the harrow on our corn ground, and we challenge any farmer to show by any other mode so good a condition of the crop and soil as our corn field now presents. For the want of the proper kind of planter we are compelled to use one of Brown's planters, but we do not check-row with it. Another season we hope to have a planter attached to the roller as proposed in No. 5.

#### A STILL FURTHER SAVING OF LABOR.

In check-rowing it is well known that the whole field must first be plowed, next harrowed and laid off in rows one way. The planting follows; by this time the weeds have a good stand and are ready for the race with the corn. On the other hand if the planting followed the plow day by day the first planting would be ready to work by the time the planting of the field is completed, thus making no delay. following culture in rapid succession as the corn becomes developed. The surface being smooth and no clods to roll on the hills as the cultivator passes rapidly along the rows, more land can be gone over. The horse finds it easier work, so does the driver who is also gratified at the superior manner in which his work is done.

#### COST OF CULTIVATING FIFTY ACRES.

No. 1—Sixty days with man and horse, five workings of twelve days each, at \$1 50.....	\$90 00
No. 2—Would be the same.....	90 00
No. 3—On account of the more thorough harrowing, would require but four workings....	72 00
Nos. 4 and 5—Same as above.....	72 00

But we claim for this last a much better yield, on account of early planting and the more favorable condition of the soil.

In the above we have contemplated the use of the double shovel plow. When Nos. one and two are ready for working, the weeds will have attained an alarming size, and will require the second working soon after, whereas the others will be comparatively free of weeds, and will not be in such a hurry for the use of the cultivator. With fair weather, one man and horse will be able to work forty acres during the season, of about fifty days.

#### COST OF SAME WITH TWO-HORSE CULTIVATORS.

No. 1 and 2—4 workings, 24 days at \$2 00....	\$48 00
No. 3, 4 and 5—3 workings, 24 days.....	36 00

Thus reducing the cost nearly one half. The two-horse cultivators should run on broad iron rollers not less than a foot in width to pulverize the small clods. With both processes we add five

bushels more to the average yield bringing it up to forty instead of thirty bushels per acre. In this way we make a large saving in labor, and in the aggregate make little, if any, addition to the cost of tools, while the crop is increased at least on an average of ten bushels to the acre.

It will thus be seen that the point at issue in the great corn planter suit, Case vs. Brown, can be of no value to either for the future, and can only effect past sales. More than half the farmers have discontinued the use of the double drop, the valve is at best of doubtful utility in check-rowing, and a decided disadvantage in planting one way as we propose.

We hope the makers and inventors of corn planters for the next season's use, will carefully study this view of the case, and give us a real improvement over the present mode. The thing can and must be done. The introduction of two horse cultivators has made a change in the mode of planting, a necessity; but the low price of corn more potent than all, compels us to economize at every point, in the production of this great staple of our State. Eastern farmers will see by a careful reading of the above, that we can send them corn cheaper than they can possibly grow it, and that they must turn their attention to some other crop in its place.

#### RURAL.

**FARM IMPROVEMENT.**—In seeking to increase the fertility of the farms, "two things," says the Genesee Farmer, "must be borne in mind. One is, that the growth of some crops impoverishes the soil more than others; and secondly, that some crops make richer manure than others. Thus, a crop of red clover does not impoverish the soil as much as a crop of timothy grass, while a ton of clover hay will make manure worth half as much again as that made from a ton of timothy hay. The same is true of peas and beans. The manure from a given weight of these is worth double what it is from oats, barley, rye, or Indian corn."

**THE children of sugar growing countries have good teeth, although they almost live upon sugar in one form or other. Housekeepers must spare their allowance upon some other ground than this. Children crave it, and ought to have a liberal supply, as it is a highly nutritious substance. It has also balsamic properties, and assists the respiratory functions. An inordinate quantity, of course might derange the stomach.**

**TON WEIGHT AND TON MEASURE.**—A ton of hay or any coarse bulky article usually sold by that measure, is twenty gross hundred; that is, 2,240 pounds; though in many places that ridiculous old fashion is being done away with and 2,000 pounds only counted to a ton.

In the choice of a wife, take the obedient daughter of a good mother.

### Purple Can Raspberry.

I can only speak of this fruit so far as my experience goes in testing it. I think more of it than any other small fruit growing, of its class, having fruited them by the side of eight different sorts, and am well satisfied of its qualities and hardness. With me they require no protection in winter, and thus far have borne full crops each year, except in 1859, when the "June frost" damaged them, so that I had but half a crop. The flavor I never saw excelled for table use, jelly or preserves—have also manufactured some wine from the fruit, which has no equal, readily commanding one dollar more per gallon than other sorts.

The preparation of land for a raspberry plantation is simple and easy. One thorough plowing in fall, and if the soil is clay, enrich with well rotted cow or chip manure. Set young plants in spring four feet each way, tending well with horse cultivator, or hoe to keep clean. The following spring with willows to stakes driven to each plant, and cut the tops off, so that the plants will not be more than four feet high, when the fruit spurs shoot out, and the fruit is easily gathered while standing. Cut out the old wood the following spring, till new growth to stake and proceed as before. The preparation and care is so very simple my only wonder is that every family in the country is not well supplied with the fruit. It is certainly no humbug such as we sometimes have imposed upon us by itinerant tree peddlars.

C. H. ROSENTIEL.

—We do not think stakes and willow twigs at all necessary in the culture of this very valuable fruit. Our practice with both that and the black cap is to cut back to within two feet of the ground and to dispense with the stakes altogether. Our plants are set in rows six feet apart and in the row about four feet. This gives enough space for the plant to spread and for horse culture.

The following are the commercial weights of a bushel of different articles, viz: Wheat, beans, potatoes and clover seed, 60 pounds. Corn, rye, flaxseed and onions, 56 pounds. Corn on the cob weighs 70 pounds. Buckwheat, 52; barley, 48; hempseed, 44; timothyseed, 45; castorbeans, 46; oats, 32; bran, 20; blue grass seed, 14; salt, 50, according to one account, but Onondaga salt is 56, (the real weight of coarse is 85 pounds to the bushel;) dried apples, 24; dried peaches 33, according to recently published in numerous papers, but according to our experience both are wrong. I have seen thousands of bushels sold at 22 pounds to the bushel, which will measure about three pecks.

A LASH of goat, ashes, g. &c., 12 barrels; of corn, 10 quarts; of gunpowder, 24 barrels; of flax or feathers, 1700; of wool, 12 sacks.

### New Steel Plow.

THE Palo Advertiser says they have a new plow made by the Collins Company, "and which seems destined to do away with the use of all other kinds, on account of its rare combinations of desirable qualities. It is entirely new in several features, and demands the attention of every farmer who studies economy. The plow is cast by pouring steel into iron moulds, which chill the steel, giving it a hard, smooth surface, causing it to wear longer and move through the soil with less friction than any other plow. Each section is cast of varied thickness, giving the exposed parts any required heft. The 'shin,' for instance, is nearly three times as thick as in ordinary plows. Apparently this 'cast, cast-steel' plow will last as long as three or four of the 'cast-steel' plows now in use. Its surface is so hard that a knife or even glass will make no impression on it, and it shows temper equal to the best edged tools, and is recommended to 'scour' in any soil." We can see no more difficulty in casting a plow of cast-steel, than to cast a bell of the same metal. For this purpose old files and scraps of cast steel are used. The steel is melted in Plumbago crucibles and undergoes no change, and is probably as valuable as though rolled or hammered.

### The Fawkes' Steam Plow once More.

It will be seen by reference to our advertising columns, that Mr. Fawkes has returned to Illinois to endeavor to demonstrate, practically, the feasibility of working our prairies by steam power. Mr. F. will certainly never fail of success from want of perseverance. He has expended years of time and thousands of dollars in the steam plow enterprise, and though at times, seemingly almost sure of the laurels for which he has been striving, has nevertheless stopped short of the point of success. He no longer asks or expects the encouragement of Agricultural Societies or Railroad Corporations in the way of large prizes. He is conscious that the people have lost confidence in his invention, but his own confidence in its capability to plow and ditch profitably, is unshaken. He has come back to prove this by actual tests in the field.

The encouragement he asks is work to do and pay for what he actually performs. It is an encouragement to which he is entitled, and we sincerely hope it will not be withheld from him. There are men both in this city and out of it, that have extensive farms to drain and plow, and who intend to have it done. To these we appeal to give Mr. Fawkes a helping hand. There is no risk in the matter. Money, more than actually earned, is not asked for. A chance to work at fair prices—less than the same work can be accomplished for by other means—is all that is desired. Who will set the steam plow at work? It is a final effort on the part of the inventor, if he fails. Let him not fail for want of opportunity to try for success.—Prairie Farmer.



## Sheep and Wool—Early Shearing and no Washing.

If you will pay me a visit during the first week in May, you may expect to find me shearing the Spanish Merinoes. I still believe that early shearing is for the good of the sheep, and if it were not for some prejudice existing against early shearing, I think my fleeces would all be taken off previous to, or by the first of May. Many a man has been victimized by "sheep pedlars," with early shorn sheep, and those that have been "stubbled;" so that, if you tell a man that your sheep were shorn in April, he is afraid there is something wrong; but, if you can frankly say that your sheep were shorn in May, there are no fears of any deception.

As soon as the weather gets warm enough for vegetation to begin to put forth, the fleece becomes a burden to the animal; and if one has suitable stables, to protect them in stormy or windy weather, the sheep should be relieved from its fleece at once.

Any person that has never sheared early would be surprised to see how little the sheep mind it to have its fleece taken off before the weather gets above the freezing point.

At a recent meeting of the "Farmers' Club," in this place, the subject of wool growing was the topic for discussion. Many of the wool growers in this place have practiced shearing early, and I believe it is their unanimous opinion that sheep will thrive better shorn as early as the 1st of May, than if allowed to wear their fleeces a few weeks later. They had also come to the conclusion that sheep did not suffer any more when shorn early, than if it was delayed until the hot weather.

It was thought that, to take a flock of fifty or a hundred sheep, and divide them as equally as possible, the first of May, and shear one-half at that time, and let the balance run until the 1st or the 15th of June, before shorn, the early sheared ones would be in much the best condition, and would go through the summer, and come out the best in the fall.

It was further stated that to let them all go with their fleeces until June, and shear one-half in an unwashed state, and the balance washed, those that had not been washed would have a better coat (dark surface) in the fall, than the others, and would sell, in any market, for more money.

The only objection raised to shearing without washing, was the fact that wool-buyers took the advantage, and would not pay a fair price for the wool. But, notwithstanding this, many of our farmers will shear early, thinking the advantage gained in the thrift of the sheep, will more than counterbalance the loss in the price of wool.

If it is true that sheep do better by shearing them early, and in an unwashed state, we may ask why all wool growers do not adopt the practice? To my mind, there are several reasons, one of which is that they have always been accustomed to wash; their fathers and grandfathers washed their sheep, and if there had been any better way, they would have discovered it.

Another reason is that a large class of wool growers believe that it is cruel and barbarous to shear before hot weather comes on, and it is hard to make them believe that sheep suffer more with heat, in wearing their fleeces, than from cold if taken off.

The principal reason, however, I believe, arises from the injudicious manner which the manufacturer adopts in buying wool. It is a notorious fact that wool buyers have always paid a large premium on heavy, dirty wool, if they can only be assured that it has been washed, or pretended to have been washed. Perhaps manufacturers believe all wool growers are so stupid as to wash their wool clean, when they pay about the same price for heavy, dirty wool, as for that which is put up in the best order.

If we judge from the manner in which they have always bought wool, we have reason to believe that they think we wool growers are a little dull, (we grant it;) but let me say to you, Mr. Manufacturer, or wool buyer, that we are not all so foolish as you imagine, if you expect we will always put our wools up in good order, when you will, year after year, pay just as much for a dirty article, as for that which is put up in the best condition. This you have done, and, no doubt, you will continue to pay a better price for heavy, or badly washed wool, than for that which is well washed; and I can assure you that you will get plenty of wool washed after the modern style, as there is but little work in it. Formerly one man would throw in for four or five to wash; but now it takes two men to throw in as fast as one can wash.

As long as manufacturers will pay for wool that has been thrown in the water, and only just wet, the price of good, clean wool, I think farmers will wash their sheep; but as soon as they make proper discrimination, I trust, washing sheep will be done away. G. C., Vermont.

The above we find in one of our exchanges without credit, and transfer it to our pages. Had we a flock of sheep, we should never submit them to that barbarous practice of washing, but would sell the wool unwashed on its merits. In this way we would save our sheep the infliction and save our credit, besides a bad cold caught by being in the cold water several hours. We consider the above a pretty sensible article on the subject of washing and buying wool. Ed.

**HEAPING MEASURES.**—Potatoes, turnips, and esculent roots, apples and other fruits, meal and bran, and in some states oats are sold by heaping measures, which contains 2.815 cubic inches. The size of a Winchester bushel measure, is a circular ring with straight sides 8 inches high and 18½ in diameter. A box 12 inches square, with sides 7.7 1-32 inches high, will hold half a bushel.

A ton of lumber, if round, consists of 40 cubic feet; if square, 51 feet. A tun of wine, is 252 gallons.



From the American Agriculturist.

### Haying Time.

In the present month begins the great hay harvest. This is, in many respects, the most important in the whole year. Although the crop does not fill the space in the public eye, as an article of foreign commerce, which cotton does, it is yet of greater money value. Think of its fundamental use, the support of all kinds of farm stock for six or seven months of the whole year. As one says: "It is, in fact, the basis of all our farm operations, the keystone which sustains them and gives them all their success. The test of a farm is the number of cattle it feeds, and the cattle in turn feed the soil." Let us, then, see to it that our crop is this year well and seasonably made and properly stored.

In preparing for this annual campaign, be sure that all other pressing labor is out of the way. This work is enough of itself to occupy one's time and thoughts while it lasts; to have other cares superadded harrasses and perplexes one so much as to make his true and proper work very disagreeable. Get all other matters well ahead so as to feel at ease about them. Then see that the tools and implements are in good order—scythes, grindstones, mowing machines, hand rakes, pitch forks, racks, and hay oaps. The extra hired help—is that engaged?—enough of it?—and of such a sort as to be reliable?

The best time to cut hay, is an important matter to determine. The end sought in gathering hay is, obviously, to cut it when it contains its most nutritive properties, viz: mucilage, starch, gluten and sugar, in the best state for their preservation. Experience shows that that period is when the grass is in full flower. After this time the fibre becomes woody and indigestible. The Cyclopædia of Agriculture says:—"It has been proved that plants of nearly all sorts, if cut when in full vigor, afterwards carefully dried without any waste of their nutritive juices, contain nearly double the quantity of nourishing matter which they do when they are allowed to attain their full growth, and make some progress towards decay." Yet, some good farmers hold that timothy should not be cut until it passes this stage, and has nearly ripened its seed; and this chiefly for the reason that, if cut earlier, the roots are weakened and the meadows gradually destroyed. Still, as a general rule, the prevalent method of cutting grass "when in the milk" is the right one.

When hay is to be cut with scythes, the work should begin early in the day; the morning dew is a great help to the mower. There should be a liberal resting time at mid day, and then the work resumed and carried on briskly until evening. A lunch of plain food, moistened with cold coffee or home brewed beer, may be brought into the meadow in the middle of each forenoon and afternoon, if the hands will be discontented without it, but it is poor policy to keep the hands and the stomach both at work all the time, and three good meals are best for any man, however hard his work. There is enough heat in haying time without the addition of "fire-water." As to the expediency of using mowing machines, we de-

clare decidedly in their favor, especially on farms of considerable extent. They save time, labor, a great deal of anxiety, and, in the long run, money. When the mowing machine is used, do not cut a rod before the dew is off, for when the hay is out by the machine, unless very heavy, it will need no stirring.

"Make hay while the sun shines," is a good rule, but it may be carried too far in haying time. We want the bright sunshine first to wilt the hay thoroughly; then let the drying process stop. Rake up the grass in high cocks while still hot. If rain threatens, put on the hay caps; put them on by four o'clock to keep off heavy dews. The grass may lie in cocks two days or less, as convenient for the farmer. On a clear day, open the cocks about the middle of the forenoon, after the ground is warm, for an airing, spreading the hay and turning once or twice for two or three hours; then haul to the barn. The practice of salting hay at the time of storing it, is quite common, and it is applied the more abundantly when the hay is imperfectly cured. A little salt, say two or three quarts to the ton, can wisely be applied. More than this does little good, and on the whole may be injurious.

FARMERS SHOULD RAISE MUTTON SHEEP.—A writer in the St. Albans (Vt.) Messenger, signing himself E. R. T., of East Franklin, strongly recommends farmers to give more attention to raising long-wooled or mutton sheep. With them he says, "much less labor is required to realize the same amount of money, than with either cows, horses, or young cattle. The long-wooled or mutton variety, which are, perhaps, the best adapted of any kind to our soil and climate, are very hardy and easily kept. They are not liable to disease, or at least have not been so in this vicinity, so there is but little risk to be feared in this respect. They are evidently the kind for the times, when both mutton and the coarser variety of wool are in demand. There is little trouble in raising the lambs, for they are as hardy as calves, and it is nothing uncommon to see them outnumber the flock—indeed, one man in this place, the last season, raised eighteen from nine ewes. Lambs five or six months old are fit for market, which is not the case with any other kind of stock, hence the expense of wintering is avoided. The past few years, when beef has been dull and hard to be disposed of, mutton has been in good demand at profitable prices. Owing to the war, this demand is steadily increasing, and in consequence, there is a large call for store sheep at a high figure, in anticipation of future requirements. Mutton will undoubtedly continue in fair demand, as there seems to be a growing inclination for this meat, in preference to beef or pork—while so long as cotton goods maintain their present high prices, with still an upward tendency, there will be a favorable inducement, not to say necessity, for employing wool, so far as possible, for all fabrics for use or wear."

Our life should show forth our love.

**REAPER TRIAL.**—As the time approaches for the trial of Machines before the Executive Committee of the State Agricultural Society at this place, the indications for a full attendance and an interesting exhibition increases. A large number of entries have already been made, and a considerable amount of money in the form of entrance fees has been paid in. President Van Epps is about to go to Springfield to make the necessary arrangements and fix upon a time for the trial. It will take place in the early part of harvest, and will be announced in hand-bill form and through the press in due time. It is expected that many different varieties of machines, including Sorghum crushers and evaporators, although not in the proper season for testing, will be on hand. The business of raising Sorghum is one among the most valuable branches in the West. It is second only to the vast improvements in the mode of saving the grain crop. Men who are for encouraging home manufactures, home industry and home productions, will do all in their power to encourage the production of the best reapers, mowers, grain-binders, corn-shellers, threshing, sewing and washing machines, sorghum crushers, &c. We look for a large attendance of those concerned in modern improvements as well of those who are so deeply interested in their use and successful operation.—Dixon Telegraph.

—We understand that the Illinois Central and Dixon Air Line Railroads will carry passengers at half fare, during the trial. The time of trial has not yet been decided upon, but due notice will be given in time.

**CURL IN THE PEACH LEAF.**—Our attention has been called to the fact that statements have been published this spring, in many journals, charging the aphid with being the cause of the curl of the peach leaf, and a correspondent, unable to find evidence of an insect, although watching almost constantly during the progress of the curl is in some doubt on the subject, and thinks the insect must be so small as to be invisible to the naked eye. We have not the least idea that the curl of the peach leaf is caused by any insect, although Prof. Harris thought it was occasioned by an aphid, and Mr. Downing agreed with this opinion.

If we have a mild spring, and the temperature is tolerably even, there is but little curl, but one day of cold rain or cutting wind will produce curl in every orchard. The orchards that are sheltered by hills or woods, are found to be less exposed to curl, and the trees on the exposed side of an orchard will be more injured than others. As a general thing trees that are in sheltered gardens suffer very little. These points seem to point to the cause of the curl most emphatically.—Rural New Yorker.

A Sack of Wool is 22 stone; that is, 14 pounds to the stone, 308 pounds.

**BUCKWHEAT AS AN EXTERMINATOR.**—Buckwheat when on rich ground, will kill grass effectually. It must be sown as soon as the ground is plowed. In such case, a few crops will even exterminate quack. Buckwheat seems to be poison to other plants; and it is even known to destroy insects. It does this probably by destroying the roots of the grasses and herbs on which the insects feed. No insect touches buckwheat on the ground.

Prepare your soil thoroughly; pulverize, and give it the best tillage; manure added will benefit it, if not already fertile. Then, sown rather plentifully, a clean soil will appear, and a clean crop. If plowed under, and the second crop raised, there will be a garden without weeds, the ensuing year; and the tender grains may be sown with impunity so far as the insects are concerned, especially when lime and ashes have been added the year before. A little salt also (one bushel to six or eight) will aid. In this way, I have known the most obdurate quack soil to be reclaimed, and made fertile and mellow. F. G. —Valley Farmer.

**TRIAL OF CORN PLOWS.**—We are informed that there is to be a trial of Corn Plows on the farm of the Rev. J. S. Poage, three fourths of a mile southeast of town, on Tuesday of this week. Mr. Phillip Coonrod, of Keithsburg, is to be there with his machine, and challenges the proprietors and friends of all other plows, Drayden's, Carr's, or any others, to meet him in the trial. As it is a matter of importance to settle the question as to the relative merits of the various plows being offered to farmers, we doubt not the opportunity will be improved.—Aledo Record.

—A first rate idea, and would be of much benefit if just such a trial could be had in each county in the State. The great trials of reapers, mowers, threshers, &c., are not witnessed by the masses, because they can ill afford to pay railroad fares and hotel bills. Each county society should offer a premium for reapers, mowers, cultivators, &c., and have a practical trial during harvest—then the farmers could decide for themselves. The mere award of a committee will not induce people to buy machines of which they know nothing. Ed.

**DRIED FRUITS.**—The prospect of an abundant crop of apples and peaches, as well as the smaller fruits, has rendered the market excessively dull for dried fruits and berries of all kinds. The probability is that from this time forward the market will be overstocked, and prices drooping for all descriptions.—Chicago Com. Express.

—The small fruits are playing the dickens with dried apples and peaches. At the present rate of progress and the certainty of the small fruit crops, we shall need very little of the dried article.

## A Trip from Home and What we Saw.

### CROPS AT HOME.

JUNE 16.—Our corn, planted May 1, is above knee high, has been worked twice. That of the 8th to 12th, is about one foot, also twice worked, while the last planting is but just up. Most farmers in Champaign county are busy working their corn, though more or less planting will be done up the twentieth instant, which is considered the close of the planting season. As a general thing, we place little confidence in the last ten days for planting. Winter wheat is thin on the ground, and chessey as usual in such cases, but with long heads. No insects have as yet disturbed it, and probably will not. Rye is very fine. We have three-fourths of an acre of cotton which has a good stem and looks well; it has been once worked. As we intend to visit cotton-land before our return, we shall have more to say on this point. As at present advised, we see no more labor in its culture than corn beyond that imposed on the thinning out, the several scrapings and hoeings in vogue with the planters look to us as useless. The hay crop is of fine promise, in fact the crops in this county are as good as usual, though corn is very backward, yet the color and stand are both to our taste.

As we move south with the rapid motion of the train, the corn grows smaller, while the wheat improves, both in quality and ripeness, our being scarcely out of bloom, while some fields as we reach Mattoon are putting on their gold and yellow, looking to the not far off harvest.

### ROLLING CORN.

Near Oakland we saw a farmer rolling his corn. He had a large field, now up about four inches, the land was considerably cloddy from an excess of rain during the time of plowing. We wanted to stop the train and congratulate this man on his good sense, but conductor Scott could not do so, having made arrangements to be at Centralia at a particular hour; however, we done the best we could under the circumstances, and swung our hat at him, to which he responded by a long gaze as the flying train carried us out of his sight. We will bet this man takes the ILLINOIS FARMER, and further that he will have the best yield of corn in his neighborhood.

From Mattoon, we rapidly descend into the Basin of Egypt, and are soon coursing over the beds of lime mud drift, that centuries ago were

deposited in the fresh water lake that spread over this goodly land, into which the Missouri poured its turbid floods from the plateaus west of the great Father. But few fields are up and still fewer are large enough to work.

### AT FARINA

The "May" wheat is nearly ready for the sickle, some say within two or three days. The crop is good, much better than usual, farmers reporting prospective yields of twenty, thirty, and even thirty-five bushels per acre, with an average of twenty, but those along the road would hardly warrant this latter conclusion. The Pot-ticary Bros. have three hundred acres of wheat nearly ripe, one hundred acres of rye and oats and some three hundred acres of corn. They are Scotch farmers from Canada, and have been here two years. They will show what can be done with capital, energy and tact.

### PEACHES.

Strange as it may seem, there is a good show of peaches at Champaign, while at Mattoon and along the road some distance further south, the crop is cut off by frost. This is not the first occurrence of the kind, and we shall have more to say in regard to it at another time.

Here the corn planting is continued up to the time of the wheat harvest, but it is most certainly a bad plan to delay it so late in the season. April and May are by far the better months to plant in. It is a shiftless practice to say the least of it, and we hope to see it abandoned. Early planted corn is always the best.

Another drawback to late planting is that on account of the dryness of the soil the corn will not be up for one or two weeks. The use of an iron roller will remedy this by pulverizing the innumerable small lumps, and by pressing the soil so close that enough moisture is retained to insure germination. Farmers of the Great Basin, the iron roller will make your fortune if you will use it diligently and prudently; you cannot afford to do without it—give it a fair trial and you will not part with it. The subsoil plow to drain your soil so that you can plow where the land is comparatively wet, is another improvement that you need. You don't want the Michigan or trench plow, but the steel subsoil, that will loosen up the bottom and drive off the surplus water.

### AT TONTI

The land is nearly level, yet the farmers who have plowed the grounds into narrow lands, thus

making numerous dead furrows, have good crops of wheat on those dead levels; and we saw three or four large peach orchards planted on these flats. We shall yet learn how to manage these lands, though at present the formula is not very distinct or certain in its results—a *peculiar soil, requiring peculiar treatment*.

We contend that this soil is among the richest of the prairie formations, yet most people consider it poor and thin, because it so much resembles some of the sterile clays in appearance, but this is not so, it is certainly rich in all the elements of vegetable nutrition, and will yet be cultivated more intelligently and produce much more abundantly than at present. The long spells of dry weather make it suffer, but with deep and thorough tillage it must improve; drain off the surface water and clover must grow. The average crop of wheat for the last decade is smaller than we dare write for the credit of the country, but we think it can easily be doubled. The same may be said of corn; it is a shame and a sin to grow so little corn to the acre as is grown here, and to see its leaves rolled up day after day during August and September; we know there can be found a remedy. Plant early and have the surface well shaded long before the August drouth drinks up the moisture. A few patches of corn along the north side of Crooked Creek, north of Centralia, in size, approaches that with which we parted over a hundred miles north, while it should be double the size. Two degrees of latitude and two hundred feet less elevation above the sea should make a material difference in favor of this point at this season. But the better farming at the North is more than a match for the difference of climate. How long shall this hold good? How long will Egypt be the laggard in the field of progress?

Along the north margin of the creek above mentioned are several young orchards of the peach, the trees of which look promising. Some day we must make a closer inspection of them.

#### THE ARMY WORM.

In but one field of wheat do we hear of any of this pestiferous insect, and that is a field of eighty acres just west of Centralia, but they have done no damage beyond stripping off the leaves, which has not affected the yield in the least. The wheat prospect at this point is said to be good, and the fields, as we pass, bear out the testimony. Here night shut out the view and we took to the sleeping car, and were soon in the land of dreams, as the train swept

through the deep gorges and around the sharp curves in the valley of the Drury, where the peach orchards look down from the hills and nodding their wealth of fruit in the moonlight as we thunder past. We were dreaming of raspberries, blackberries, and melting peaches, with blushing cheeks—somewhere, it must have been just as we passed the court of Pomona, where some one of her attendants spied out our resting place and whispered these pleasing dreams in our ear—but she left us, and our dreams took another turn, and found us in the river floods struggling with floating trees, while the air was thick with flying shells hissing through the haze from the misty waters. We woke up; it was six o'clock; we could not be mistaken, we were in Cairo, for there is no other place like it in this round earth, but this time it was Cairo dry; when last we saw it it was amphibious Cairo, on the style of Venice, with one wide canal and the light gondola turned to dug outs, and hastily improvised water craft.;

JUNE 17.—Cairo will stand, a monument to all time, if the Mississippi in some wild freak does not dissolve it, like sugar in a cup of coffee, and sweep it down, in this diluted state and add it to the great prairies that are now being formed in the Gulf, that one day will come up dripping from the waters, to be added to our country—a rumbling from the internal fires, a rolling back of the sea—and the Gulf, where ships so lately floated, is transformed into long slopes ready for the plow so soon as the ooze-like soil shall harden in the sun. Such may be the fate of Cairo, and such the future of the gulf.

The markets here are but poorly supplied, the inhabitants being content with small favors in this line. All the early vegetables near Jonesboro and Cobden find a better market at the North, and take that direction. The farmers of Tennessee have had no time to grow vegetables, and as yet send nothing to this market. An officer from Columbus informs us that potatoes, new and large, are in abundance at that point and at Hickman, but here we have the Merino or Long Johns of last year.

#### WAITING FOR A BOAT.

19th.—This waiting for a boat is, if possible, worse than being stuck in a snow drift with a railroad train. We have two strings to our bow. The D. G. Taylor was due last evening, and the Evansville was posted for noon, but any person conversant with these river boatmen, make due allowance, as the true time of starting is from twelve hours to a week from that set on the



bulletin board. The Taylor came in twenty-four hours behind time, and so heavily loaded that we concluded to take our chances on the Evansville, which got up a steam and rang her bells to save the passengers, a trick that often takes in others besides the green ones. It is said that all things must have an end, or at least new things must have a beginning, and eight hours later the Evansville swung her head to the current of the Ohio. About the middle of the night the river was shut in from shore and headland with such an impenetrable fog that the anchor was thrown out and steam shut off. The morning sun came up struggling through the fog a short time before we reached Metropolis. The site of the town is a pretty one on the Illinois side of the river, and just below the site of old Fort Massac. A night on the Ohio, at this season, will give one some idea of the immense amount of water taken up in the form of vapor from the surface of our western rivers, giving to their borders a maritime climate, and of course without the healthy effect of the sea air subject to miasmatic diseases where the sun changes this air thus saturated with an excess of ammonia from the immense amount of decaying vegetable and animal matter that is exposed on the subsiding of high water. Were it not for the overflow to which the bottoms are so subject, these river dwellers could almost feed the world, but as it is, life is a continued struggle along their margins, and until we reach the higher lands above the influence of floods, but little progress is made in their social relations.

#### LATER.

It is now nine o'clock A. M., and the lazy mist hangs over the river, though the sun is out in full splendor, shining through the wreathes of mist and endeavoring to disperse them, but thus far with only partial success. It is no wonder that fruits of all kinds should do well along this stream when they are not damaged by high water; frosts cannot injure them, being thus protected by the heavy fogs that shut out the frost. The whistle is now sounding for Paducah, which is glittering through the river mist. We reach the wharf and find the city solitary and without the appearance of business. The site is a good one, and the place must have done a good business at no time of day, but now the stores are mostly unoccupied. The residence of the rebel Gen. Tilghman is pleasantly situated on the bank of the river in the upper part of the city, being surrounded by a fine lot of shade trees, it

makes a pleasant and valuable retreat for the sick soldier. Ripe apples, blackberries, and the Morillo cherry were sold freely to the passengers. With this river climate and fine soil, almost all of the finest fruits can be grown, but want of enterprise is the bar to progress. After the war, this part of the South must, of necessity, receive an infusion of Northern energy which will leave the whole body politic and make these river towns points of no small importance. Toward sunset we reach Fort Henry, but can only examine its round walls from the deck of the steamer. The country thus far has presented a very even appearance: the soil is evidently from an impure limestone strata, and is rich in all the elements of a good soil. The whole country along the river only lacks the energy of free labor to develop its rich resources, when it would be among the most desirable in the West. With the skies of Italy and the mild zephyrs that come up from the gulf; with its rich calvarious soil and gentle rolling surface, this part of Kentucky should be carved out into thousands of happy homes; but the cause of slavery is over all, and along the banks of this beautiful river; there is no villages, no comfortable barns, no school houses, but long tangled forests, with here and there the log house of the poor *white trash*, who get a penurious living by furnishing wood to the boats. Now and then a farmhouse with no great pretensions to comfort, a few apple trees, a dozen, perhaps, of Morello cherries, and a few peaches, sum up the orchard. The soil and the climate both conspire to make it almost the seat of Pomona, but the indolence and want of energy of the former so ably seconded by the negroes leave them with but a precarious supply of all this health giving food. But the time cannot be far distant when the banks of this beautiful stream will be lined with happy homes, and school houses and churches like mile stones mark the way. Soon after we pass into Tennessee the country along the river becomes more broken and the hills encroach upon the river and the overhanging trees brush the deck of our steamer. The soil has somewhat changed, and we see small leads of gravel here and there, with strata of blue clay. Occasionally the soil is colored with iron, similar to that of our own grand chain, of which these ridges form the south-eastern extension.

JUNE 20.—The river fog again arrested our progress and the boat lay at the shore for some hours. The weather, which has been very cool for the season the past three or four days, is again fine and rather warm; woolen is coming



off and linen coats going on; the passengers are looking for the shady side of the deck, and imbibing freely of iced drinks into which they pour fluid that is called "Old Bourbon," a commodity that is said to have been invented in Kentucky. From the effect it has on some of the passengers, we think it no better than sad corn whisky from the use of which we wish to be excused. Those who are accustomed to railroad travel can have little idea of the slow progress of a boat up stream at the rate of six miles an hour, shut in from a view of the country by the interminable river forest. There is so little change in scenery that during the long summer days as you ride day after day it becomes wearisome. The spell is occasionally broken by meeting a steamer or the passing of a farm house; but hours often intervene between the sight of either and the river forests looks as unbroken as when Boone first wended through its stately aisles of majestic oaks, festooned with tall, climbing vines that shut out the sun. We were fortunate in securing a state room that opens out upon the east bank of the river and find such amusement as we can in watching the shore and catching glimpses now and then of the far off hills and the specs of civilization that are sprinkled here and there among the solitudes of the river forests, unbroken save by the steady breathing of the laboring engine as it drives the trembling craft up against the stream.

The evidence of human life grow more and more numerous as we ascend the stream; we passed a railroad bridge in complete ruins; a few miles further is the graded bed of another butting on the river, asking to cross over—a large pile of iron lies waiting for the ties; but the men that are to cut and hew them are busy with the engines of war. The latter road is a part of the line from Hickman to Nashville.

It is said that misery likes company and so it seems. The Daniel G. Taylor, a large steamer, loaded to the water's edge with military stores and troops, had preceded us some eight hours at Cairo, but we have just passed her and our passengers send up a shout of joy to think that they are not on the slowest boat; that there is one still slower; we confess a little to the joy ourself, for we had waited several long hours for her arrival at Cairo. The soil has changed to a darker hue, and here where a ridge of land juts to the river, just above the water edge, is a ledge of blue limestone, the first that we have seen.

JUNE 21.—Another foggy night and its consequent *lay to*. At last it is lifted from the river and we again steam up stream. The ferries and wood boats have been swept from the stream by the gunboats, and there is little communication now in fact none but the common dug out or improved skiff.

We now meet with high bluffs of stone and ledges through which the river has cut her way, and the country is broken into hills and narrow valleys, and has altogether a wild and, to the farmer, an uninviting aspect. Stopping to wood we went on shore for an hour and took a pretty thorough look at what is called a large plantation. The corn looked fine; was fully our height, with many hills a foot above. It was laid by; this had been done by a diamond plow throwing heavy furrows against the hills; of course, for a week or two, it will make little, if any, growth, until a new set of roots have time to put forth. The peach trees—a dozen or two—were loaded with fruit, and so of the apple trees whose branches were seven to eight feet above the surface. Our low headhobby would not answer here for the nigger would pick off the fruit, but these high heads are out of their reach and they must be content with the windfalls. No other fruit could be found in the garden which was planted to early corn for roasting ears. In the field near the house pole beans had been planted with the corn, and were making good progrees up the stalks; with this exception we could see no vegetables designed for the table. Several negro children were busy about the place, while the whiter ones were staring at the passengers. The corn being laid by, the older hands were busy hauling up wood for the boatmen.

JUNE 22.—It is Sunday morning, and the sun begins to pour his warm rays on to the river, shut in, as it is, by the forest walls and high bluffs from the west wind. Three or four hours more and we shall land at Hamburgh, from where we have an overland journey to Corinth, which we hope will give us an insight to Tennessee farming.

JULY 1.—Since leaving the steamer at Hamburgh, we have been taking short trips in the country and attending a sick son, who had been worn down by the inconsiderate forced marches of General Pope's command. Remittant fever was the cause, but as we do not intend to inflict our readers with any details, will return to our notes of the country.

## ELEVATION OF THE COUNTRY.

On leaving the river we rise several hundred feet, the country is broken into small hills of one to two hundred feet, mostly covered with a small growth of jack oaks, hickory, white oak set. Farm houses made of logs nestle between the hills. The fences have been stripped from the fields and most of the families have left. The soil is a thin whitish clay, pretty fully intermixed with sand, which forms a mortar bed when wet, and a solid brick like surface when dry. The springs at the base of the hills are abundant, and contain very soft water, charged more or less with sulphate of soda. Near Farmington, seventeen miles to the west, pitch pine becomes quite abundant on the hills, while the swampy valleys are covered with a heavy growth of the beech. If these swamps were cleared and drained, they would make valuable cotton lands, and also desirable for corn and herds grass. The natural grasses are all annual and of little value. At Farmington we must be not less than fifteen hundred feet above the level of the sea. The whole distance from Hamburg has been skirmishing ground, and the inhabitants have fled. We saw but one small field of corn in the whole distance and that nearly half a mile from the road. From that place we came about five miles to Gen. Pope's headquarters, and for the past week have made our home with the 26th regiment, Col. Loomis, which is now encamped at

## DANVILLE, MISS.,

About twenty-seven miles from Hamburg and eleven southwest of Corinth. Between here and headquarters is the swamps of the Tuscumbia, which, at this point, is a small stream. The land of these bottoms is a sandy loam, and is covered with a dense growth of beech, interspersed with poplar, linn and other soft wood. We have never seen this beech timber rivalled even in Northern New York; their straight trunk, short branch and delicate foliage, brought back the recollection of boyhood, when by single blows we have laid low acres of the same beech wood forest. The labor expended in making roads through these bottom lands for the heavy transportation of the army has been immense. In all cases there are two of these roads parallel, for no single road would be sufficient to accommodate the travel. The swamp is two miles to the east. About here the land is less broken, more sandy than the hill land to the east, and the American chestnut takes the place of the pine, yet along all the

borders of the small streams we find the white, the red, and the water beech. Vegetation is but little if any in advance of that at Paducah, the elevation compensating for latitude. Blackberries are yet abundant, the wild plums are nearly gone, and the Carolina red June apple begins to show the first blushes of maturity. The horse apple which is the great favorite for a summer apple and for drying, is about half grown.

## THE WHEAT AND OAT CROP

Are both a dead failure by the rust, and in most cases the farmers have turned in their stock. This point having been held by the rebels until the evacuation of Corinth, but few of the farmers have been disturbed, and the fences, in most cases, remain. But in the unsettled state of the country, little planting has been done; add to this the want of energy of the farmers and the heavy spring rains, and one can have some idea of the dilapidated state of the agricultural interest. A few days since we went three miles beyond the picket lines of the camp on one of the country roads, to see a cotton plantation. All of the farms were occupied, the country the most level and fertile that we have met thus far in the State, but there will not be enough produced to subsist the people.

## CULTURE OF COTTON.

It requires about three hundred and fifty pounds of seed cotton to make one hundred pounds of seed cotton, and the average crop on the uplands is two hundred pounds of clean cotton, which, before the war, sold at ten cents the pound. The soil here is a mixture of sand and clay. A large part of the timber here is jack oak, with post and white oak, hickory, both sweet and sour gum, and other varieties indigenous to this climate. After we pass half a mile west of Danville the country is almost level. While the squad of soldiers with us were busy picking the tempting blackberries, we strolled into the farm houses. The first day out the only white man we met was a white doctor with a very black heart, attending some nigger patients. The men, if not in the Southern army, are not to be seen. We took dinner with a widow lady and her two daughters. She had three sons, all of whom had been drafted soon after the battle of Shiloh. The old lady was stubborn, but the daughters, one of whom was a widow, were more communicative. They very graciously permitted us to visit the fields and garden, but the old lady would not allow them to go out with us into the

garden, the ground being a little damp from the effect of a thunder shower early in the morning. The management of the farm devolved on the niggers, of which she had about a dozen of all ages and sexes. The corn was about two feet high, is planted in rows about four feet wide and in hills three feet apart, these are thinned to one stalk in the hill. This is the customary way of planting in this part of the country. A good crop is four barrels of five bushels of each shelled corn, making one and a half bushels of ears for one bushel of shelled corn. The crop in question will not turn over ten bushels per acre if the weather should prove favorable hereafter. The hogs run in the woods and will be nearly fattened on mast. A specimen of this style of bacon was boiled for dinner, and judging from its oily nature would only require a wick to make a good candle; of course this food is redolent of scurvy and continued fevers. The corn bread is simply meal mixed with water and baked. A loaf of this would make a very solid shot to send at an enemy, but with this oily bacon not desirable to place before a friend for dinner. Yet these two articles form the staple food of the wealthy planters! the poor whites and contented niggers. The orchards are small, generally less than fifty trees, for the use of the family and its happy dependents. The horse apple and willow twig are the chief varieties. The apple trees, even on these elevated hills, are short lived, seldom surviving beyond twenty years. The tree becomes scrubby at an early stage, generally with the exception of the varieties named, which are now bending beneath their loads of fruit. Peaches are abundant, but of course all seedlings.

#### A VEGETABLE AND FLOWER GARDEN.

Our widow lady being among the first families in point of wealth and standing, it would be expected that she should put on some style, consequently she must decorate her grounds and put the family mansion in order, more especially as she had two interesting daughters on whose education she had expended no small sum. The family mansion is made of hewn logs, divided with the usual twelve feet porch, and containing one room in each wing. The negro quarters are institutions of unhewn logs, chinked and plastered with mud, they are located in the back yard within a convenient distance of the house. The yard in front of the house is enclosed with a close picket fence; it contains jack oaks, a mimosa twelve feet high, now in full bloom, and with its spreading head and acacia-like leaves

and covering of delicate flowers, is an object of no small interest. To the right of it is a double Althea in full bloom, and some ten feet high. A few stunted arborvitas and red cedars compose the ornaments of the front yard. The garden is the right to the house, and contains nearly half an acre, in which roses, cucumbers, dahlias, cabbages, chrysanthemums, beets, verbenas, potatoes, tiger lillies, onions, pomegranites, tomatoes, flowering almonds, squashes, coxcomb, asparagus, caetas, beans, balsams, strawberries, pinks, corn, Jerusalem cherries, iris, lettuce, snowballs, Persian lillacs, etc., are mingled in promiscuous confusion. The center is graced with an arbor, covered with a magnificent yellow flowering honeysuckle, and near by a fine specimen of magnolia four feet high. This is what might, with propriety, be called mixing the beautiful with the useful. The negroes have things pretty much their own way, and not being particularly interested in the sum total of the profits, things have become somewhat neglected.

The next day a further stroll brought us to dine with a half Union man. This was one of the small farmers, superintending and laboring with his own negroes; one, a grown man of all work, and a boy a dozen years old. He was 63 years of age; had several children, all of whom were married, and settled down on farms, but none of them are in the rebel service. He has five bales of five hundred pounds each stowed away out of sight of the cotton burners, and so soon as he can get it ginned will send it to market. He has about one acre against his usual field of twelve acres.

#### HOW HE CULTIVATES COTTON.

The ground is plowed early in April four to five inches deep; it is then thrown into ridges. With the rude plows in use the ridges are but slight, two furrows thrown together with a plow eight to ten inches wide. On top of this ridge a small opening is made with a wooden implement in which to deposit the seed. This is to protect the seed from the heavy rains. The clayey nature of the soil is such that at best it is full of small lumps—the use of a cast iron or even a wooden roller would correct all this and permit of flat culture; save the expense of scraping and vastly reduces the cost of culture if not increase the crop. But in the culture of cotton in this neighborhood, brains and proper implements are not much in vogue. These ridges are four feet apart and from two to four bushels of seed is sown to the acre, a quantity altogether unnecessary. Af-

ter scraping, the plants are thinned to an average of one foot in the drills. On a plantation adjoining, the owner thins to six inches. The reason assigned is, that in case planting by choking the growth the crop will mature in better season and though the balls will not be so large, yet the increased number will more than compensate for size. In the bottom lands more space must be given. It is well known that thick seeding of the small grains hastens their maturity, and the same effect may be produced with the cotton. It is certainly an experiment worth making so near the northern limit of its growth as our own State. The plants are now an average of a foot high, and after another working the crop will be laid by. The blossom buds are forming and in a short time the plants will be in bloom.

Five acres of cotton and five of corn or other crops, is the average per hand.

The average price of cotton at Corinth is ten cents, which at one thousand pounds per hand would be \$100. Deduct from this five dollars for rope and bagging and one-twelfth for ginning and we have left \$86.50 per hand for the cotton alone. The corn and other farm products go to subsist the family. Thus it will be seen that even on these light soils, and with poor culture, that cotton culture is very profitable. With the rich soil of the prairie, if cotton can be grown at all, it cannot fail of being one of our most profitable crops. The experiment now making on the prairies will be somewhat conclusive on this point.

Irish potatoes do but poorly, while the sweet potatoe does well, and the farmers might, if they would, have an ample supply the year around as well as of all other garden vegetables, the seeds for which must be grown at the North. On several occasions the farmers have apologized for the want of better gardens from the fact that the blockade has cut off their usual supply of seed; they aver that home grown seed will not produce good vegetables. This is a fact not generally known, but we believe freely borne out by experience.

**HARVEST IN BOND COUNTY.**—The wheat crop in this county is better than it has been since 1855. A large portion of it was cut and shocked last week, but we presume very little has been cut this week, as it has rained hard and frequently, making the ground too soft to put reapers in the fields. We fear a great deal of wheat will be lost on account of wet weather. —*Greenville Advocate.*

CORDORA, ILL., June 19, 1862.

ED. ILL. FARMER, *Dear Sir:*—Upon noticing your letter to the Chicago Tribune, of June 12, upon the cultivation of corn and the kind of machine to use for cheapness, finds me with just the machine. I have been for some time at work upon a machine of just your stamp, one which will plant and roll the ground at one time—sixteen acres per day. The machine in combined; it is intended to sow all kinds of grain and cultivate it in, with the roller to follow and complete its work. I have not yet obtained a patent upon this machine, but have labored considerably upon it in order to get it up in good style, and now I have come to a stopping place, and that is for want of means to carry it out. I noticed your letter in the Tribune, and would venture to write you and get your attention. I will send you a full description of the machine, or the model, and see if you would get a patent upon it for me. I feel anxious to do something with my invention. Please answer and much oblige.

N. H. KETCHAM.

—The article alluded to above will be found in this number of the FARMER, and we give Mr. K. the benefit of one column. We are gratified to know that others have seen the necessity of the planting to follow the plow, and trust that by the next spring we shall have the tools to do it with. All we need is simply a pair of planters attached to a cast iron sectional roller. Whether this is patentable or not we cannot say, but have some doubts in regard to it, though the mode of combining the two may secure a patent that would protect the inventor. It is probable that some enterprising manufacturer can be found who will take an interest in this matter. The days of the present race of corn planters are about checkrowed out. Ed.

**FEEDING OATS TO HORSES.**—The same quantity of oats given to a horse produce different effects according to the time they are administered. I have made the experiments on my own horses, and have always observed there is in the dung a quantity of oats not digested when I purposely gave them water after a feed of oats. There is, then, decidedly a great advantage in giving horses water before corn. There is another bad habit, that of giving corn and hay on their return to the stable after hard work. Being very hungry, they devour it eagerly and do not masticate; the consequence is, it is not so well digested and not nearly so nutritious. When a horse returns from work, perspiring and out of breath, he should be allowed to rest for a time, then given a little hay, half an hour afterward water, and then oats. By this plan water may be given without risk of cold, as the oats act as a stimulant. —*Journal d'Agriculture.*

From Gardener's Monthly.  
Vegetable Garden.

At the end of June some celery may be set out for early crops, though for the main crop a month later will be quite time enough. It was once customary to plant in trenches dug six or more inches below the surface; but the poverty of the soil usually at this depth more than decreases the balance of good points in its favor. Some of our best growers now plant entirely on the surface, and depend on drawing up the soil, or the employment of boards or other artificial methods of blanching.

Very rich soil is essential to fine celery, and well-rotted cow-dung is one of the best manures for this crop.

Cabbage and Brocoli may still be set out for fall crops, also requiring an abundance of manure to insure much success. Lettuce, where salads are in much request may yet be sown. The curled Indian is a favorite summer kind; but the varieties of Cos, or plain-leaved kinds, are good. They take more trouble, having to be tied up to blanch well. Many should not be sown at a time, as they soon run to seed in hot weather.

Beans produce enormous crops in deeply trenched soils, and are improved as much as any crop by surface manuring. We hope this method of fertilizing the soil will be extensively adopted for garden crops this season. Those who have not yet tried it will be surprised at the economy and beneficial results of the practice. Peas for fall crop may be sown. It is, however, useless to try them, unless in a deeply trenched soil, and one that is comparatively cool in the hottest weather overhead, or they will certainly mildew and prove worthless.

Cucumbers for pickling may be sown this month, and endive for fall salad may be set out. Parsley for winter use may be sown now in boxes of rich soil, and set in a cool, shady place till it germinates.

Tomatoes do best when suffered to grow flat on the ground; and in such cases the soil should be covered with a mulch of straw or litter to keep the tomatoes from getting soiled and rotten by dampness. Brushwood is an excellent material for them to lie on, and they seem to thrive well with it about them.

A-paragus beds should not be cut off after the stalks seem to come up weak, or they will be but a poor crop the next season, and the beds will "run out" in a few years.

Herbs for future use should be cut just about the time they are coming into flower. Dry them in the shade, and after sufficiently dry to put away, tie them in bunches, and hang in a cool shed, or place them loosely between the paper, and stow away in cupboards or drawers,—the last mode is by far the cleanest and most approved plan with the best housekeepers. Some, indeed, powder the leaves at once after dry, and put away in bags ready for use.

TO MAKE CURRANT JELLY WITHOUT BOILING.—Squeeze the currants through a thin cloth, and add one pound of sugar to a pound of juice, and put in the sun two or three days.

Rates of Commission Adopted by the  
Chicago Board of Trade.

COMMISSION ON SALE OF GRAIN, ETC.

\*Wheat.....2c per bushel.  
Corn, oats, and all other grains.....1c per bushel.  
On sales of other products or property of any kind, over \$100.....2½ per cent.  
Do. do. under \$100.....5 per cent.  
The above without advance or acceptance; that to be subject to agreement.

Without agreement—For advancing..2½ per cent.  
For accepting...2½ per cent.  
For guarant'g sls..2½ per cent.

On withdrawal of consignment 2½ per cent. on amount of expenses incurred, and 1½ per cent. on invoice.

On Charters 2½ per cent. on freight list.

For effecting Marine Insurance, the return premium and script.

COMMISSION ON PURCHASES OF GRAIN, ETC.

For purchasing wheat from canal boats or warehouse.....1c per bushel.  
\*Do. do. railroads in small lots.....2c per bushel.  
For purchasing corn by cargo.....1c per bushel.  
For purchasing oats by cargo.....½c per bushel.  
For purchasing corn, oats, or other grain in less quantities than cargo..1c per bushel.  
Do. all other property over \$100....2½ per cent.  
Do. do. under \$100.....5 per cent.  
For negotiating bills (without agreement).....1½ per cent.

All expenses actually incurred to be added.—The risk of loss by fire (unless written order to insure,) and of robbery, theft, or other unavoidable occurrences, if the usual care be taken to secure the property, is in all cases to be borne by the proprietors of the goods.

Interest to be charged as per agreement.—Without agreement 10 per cent. to be the rate.

\*Custom has reduced this charge to 1 cent per bushel.

NOTE.—No official action has been taken by the Board of Trade in regard to Rates of Commission since the date above given, though changes are frequently proposed, and the old regulations are by no means universally adhered to.—Express.

INFRINGEMENT SUITS.—The case of Case versus Brown for infringement of Corn Planter Patent which has been on trial for some time past, we understand has been decided in favor of Brown.

We also understand that the manufacturers of the Haines' Harvester, Messrs. Barber, Hawley & Co., claim that there are infringements on their machine, and that they propose to commence suit for infringement on the manufacturers of the Mayberry Harvester, at once, in the United States Court.

Where decisions are made against parties infringing, it not only affects the parties themselves but all who purchase and use such infringing machines, making them liable for damages.—Prairie Farmer.



## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, JULY, 1862.

### Editor's Table.

JUNE, with its waving verdure, full robed forests and wealth of flora, is rapidly speeding on; it is the month that gives promise of the harvest, the month of active exertion, the month that neglect shows itself in lessened crops and untidy farms.

With the war drawing off our laboring population, we must expect to see untidy fence corners and fields more or less jagged with weeds, but we are happy to know that there is less of this than could reasonably be expected. The disposition to more thorough farming is showing itself everywhere, and so soon as labor becomes abundant we may expect to see the prairie farms patterns of nestness, thrift and profit.

The winter wheat crop in Egypt is very fine, better than for years past, and in Central Illinois it is much better than anticipated at the time of our last issue, the heads are long and well filled, but we must put in our protest against foul seed. Chess and rye are altogether too abundant, in fact in some fields it is difficult to say which predominates. The chess controversy will continue so long as the farmers have no barns or good fanning mills, but as these come in the chess will go out. In good barns the seed wheat will be threshed with flails or horses and not be injured by passing through the sharp edges of the fast revolving thresher which is the chief cause of so many poor stands, allowing the chess which no beating can injure, to fill in the vacant space. By culling the rye out of that portion of the crop used for seed this nuisance can be abated.

The corn crop is backward, but, on the whole, promising. Our corn crop is the best that we have seen in our late excursion through several States south. In Tennessee we saw a few fields, more favored, but the average even there was below, and we again call attention to the value of early planting, and that to follow the plow at once and roll.

The rye crop is fine, and oats give thus far good promise. In Tennessee and Mississippi the wheat and oat crops are almost entirely ruined with the rust. Not a tenth part of the seed sown will be harvested.

Of the crops in the north part of the State we know nothing personally, but we trust the heavy rain and cold spells have checked the ravages of the chinch bug. In the other parts of the State the promise of farm crops and fruit is all that could be asked. The opening of the Mississippi will have the effect to command good prices for this section which has suffered severely the past season with low prices. As we have before said, we feel less the disastrous effect of the war than any other western State, aside from the heavy loss of life in the late battles.

While the East is pouring out her treasure, the West is pouring out the blood of her sons in no stented streams, and when the triumph of James shall be closed is only known to Him who has a purpose yet unfulfilled.

FRUIT.—Strawberries have finished their yearly visit in this latitude; currants are in their prime; raspberries—purple cave—are ripe, and soon blackberries, plums, peaches, apples, etc., will add their weight to the farmers' table. The Keswick Codlin apple is large enough to cook for sauce by the tenth of this month; the Early Harvest and Red June will be ripe a few days later. If our farmers and villagers would invest more in small fruit, and eat less meat, they would have smaller doctor bills to pay during the warm weather.

WITH THE ARMY.—Having been absent nearly three weeks with the army near Corinth, Miss., we have got behind hand with the FARMER, but intend to have it out on time in the future. Next month we shall give a few notes of what we saw while on our travels.

MAY OR KENTISH CHERRY has, as usual, borne a full crop with us. It should be in every garden and village lot in the State.

**STATE HORTICULTURAL FAIR.**—This Fair is to commence Sept. 8, and hold one week, at Bryan Hall, Chicago. It is the first Fair of this valuable State institution, and we hope to see it a most complete success. The premium list is now out and ready for delivery. Any of the officers can supply it. We give their names and address:

Ex-President and Counsellor—Dr. John A. Kennicott, The Grove.

President—O. B. Galusha, Lisbon, Kendall county.

Vice-Presidents—1st District—Chas. D. Bragdon, Chicago.

2d District—Robert Douglas, Waukegan, Lake county.

3d District—Charles H. Rosensteil, Freeport, Stephenson county.

4th District—J. H. Stuart, Quincy, Adams Co.

5th District—Arthur Bryant, Princeton, Bureau Co.

6th District—J. H. Nash, Ottawa, LaSalle Co.

7th District—M. L. Dunlap, Champaign, Champaign Co.

8th District—K. H. Fell, Bloomington, McLean Co.

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11th District—Chas. Kennicott, Sandoval, Marion Co.

12th District—Jas. E. Starr, Elsah, Jersey Co.

13th District—G. H. Baker, South Pass, Union Co.

Corresponding Secretary and Actuary—C. T. Chase, Chicago.

Recording Secretaries—W. C. Flagg, Moro, Madison Co.; J. T. Little, Dixon, Lee Co.

Treasurer—S. G. Minkler, Specie Grove, Kendall Co.

There has been no time in the history of the country, when so much interest has been taken in horticulture as the present one. This Fair will therefore be timely to give the ball such an impetus that its onward progress cannot be stayed. Send for a premium list, and see if you cannot send in something that will win. The list is so extended that almost every grower will have a chance to try his hand.

It is the intention of the Board to publish a report of its proceedings, and all members will be entitled to a copy. Parties wishing to become members should hand their dollar to some one of the officers and receive a certificate of membership.

**"MEMBERS' PRIVILEGES.**—A member's ticket admits the holder and lady to the Fair during its session, entitles him to return passes over railroads extending such facilities; to exhibit horticultural products; if a resident of the northwest, to compete for the premiums in any of the departments, and to all other privileges of the soci-

ety, for one year. Minor children of members may also compete for premiums."

We are satisfied that this Fair will be the largest one of the kind ever held west of the mountains, if not in the United States. The floral, Pomonal and vegetable products will be piled up in vast profusion; but, gentle reader, recollect that you must also lay your offering at the shrine, your quota of the grand show cannot be dispensed with.

Here is a sample of the premium:

LOT.	APPLES.
1—Best display in variety under name, 3 average specimens each .....	\$5 00
Second do.....	4 00
Third .....	3 00
Fourth .....	2 00
2—Best Summer, 6 varieties, 3 of each.....	3 00
Second.....	2 00
Third .....	1 00
3—Best Autumn, 6 varieties.....	8 00
Second.....	2 00
Third .....	1 00
4—Best Winter, 6 varieties.....	3 00
Second.....	2 00
Third .....	1 00
5—Best Autumn, 12 varieties.....	3 00
Second.....	2 00
Third .....	1 00
6—Best Winter, 12 varieties.....	3 00
Second.....	2 00
Third .....	1 00
8—Best Summer cooking, for general cultivation, single variety .....	3 00
Second.....	2 00
9—Best Autumn cooking, for general cultivation, single variety.....	3 00
Second.....	2 00
10—Best Winter cooking, for general cultivation, single variety.....	3 00
Second.....	2 00
11—Best display Siberian Crab, in variety, half peck each.....	3 00
Second.....	2 00
12—Best Siberian Crab, single variety, half peck .....	2 00
13—Best display, in variety, without regard to grower .....	5 00
Second.....	3 00
14—Best Sweet, for baking.....	2 00
20Y—Best and greatest display in quality and variety .....	15 00
Second.....	10 00
(Quantity of each to be the same as in single lots.)	
20S—Best and most valuable vegetable for table, of any variety not in general use....	5 00
209—Best and largest display in quality and variety of Irish Potatoes, not less than six sorts, half bushel each.....	5 00
Second.....	3 00
210—Best early Irish Potatoes, single variety, half bushel.....	2 00
Second.....	1 00
155—Best display of Cut Flowers of not less 50 cultivated varieties, including green house and annuals.....	10 00
Second.....	5 00
Third .....	3 00
156—Best display of Cut Roses, hardy varieties, named .....	3 00

Second.....	2 00
157—Best display of Wild Flowers, of not less than 25 varieties.....	5 00
Second.....	3 00
158—Best collection of Wild Flowers, not less than 25 varieties, under name.....	5 00
Second.....	3 00
Third.....	2 00
159—Best Herbarium of Wild Flowers, under name, giving location and habits of growth.....	10 00
Second.....	5 00
160—Best Herbarium of Wild Flowers, under name, not less than 150 varieties, collected the present season.....	5 00
Second.....	3 00
161—Best display of Japan Lillies, in variety...	5 00
Second.....	2 00

Come on, all you lovers of the beautiful, all you lovers of good health, and learn how to supply your tables with the best of food, and to decorate your homes with the beautiful in nature.

**RATES OF COMMISSION.**—For at least ten years the established rate of Commission for buying and selling grain in this market has been one cent per bushel, but in the strife of competition recently, a number of candidates for country consignments have offered their services at a quarter of a cent per bushel, in order to draw away business from older commission merchants. Great irregularity in rates, and much ill feeling, have necessarily grown out of this state of things, which has now reached a climax, and the matter will be permanently adjusted at a meeting of the Board of Trade, July 12th.

We are of course not directly interested in this matter, but we are confident that the old rate is none too high, and we hope it will not be reduced. Our country readers, who are consignors to this market, may at first thought disagree with and condemn us, but sober reflection will probably convince them—and if not, experience will certainly demonstrate to them—that they had better pay commissions, liberal enough to insure the best possible attention to their interests, by the best class of men here, who ever have engaged, or who are likely to engage, in the produce commission trade.

While the matter was rather loosely left by the Board of Trade, some very good and reliable parties may have felt at perfect liberty to cut under on rates, and others who would not have done so at first, have been drawn or forced into it in apparent self-defence, but it is of the highest importance to all parties that one rate should be decided upon; and after that is done, any Chicago man who shall propose a lower rate to a country consignor, as a bid for business, may safely be set down at once as a rascal and a thief, whose small commissions will be an excuse for a big haul on the consignments.—*Com. Ex., Ohio.*

The above is sensible advice. We know of a verity that the commission merchant will live, and if the commissions fall short, it must come

out of the sales in some way. Inadequate commissions is a premium offered for rascality. We advise our readers to avoid these cheap houses, men who work for nothing and find themselves.

**WHY BEES DIE IN WINTER.**—In apiaries where the patent frame hive is used many swarms usually perish by freezing. I can see only two reasons for this: the first is one that can be guarded against, and that is, severe cold. Almost any swarm, be it ever so strong, will freeze, if it gets cold enough, if not protected. The second reason is, that in a natural state the bees build their combs in such a shape that they are not obliged to spread out over them to get their food in cold weather, but with the patent hives they have to build them in an artificial place after a pattern not of their own choosing, consequently they are obliged to separate to get around on under the the frames unless there be holes punched through the combs and then the bees cannot always cluster as in a natural state. It will be noticed that in a gum or square hive the inside combs are shorter and dovetailed into each other so that all spreading to get around is obviated. If you want your bees to take up a great deal of time, make you a great deal of trouble and need your attention every twenty-four hours, put them in a patent moveable comb frame hive, and my word for it you will have trouble enough to winter them, unless it should be a very mild winter, and your bees have plenty of honey. I can see no reason why artificial swarming can not be practiced in common hives as in patent ones, unless it is intended to do it by moving comb with young brood which will oftener disappoint the aparian than natural swarming. I shall try artificial swarming this month and will give you the result. \*

**FAWKES**, the inventor of the steam plow, has made us a visit, and removed his plow "Lancaster," which has stood on our farm since November, 1860, to Decatur, there to be used in a machine shop to drive machinery. He has given up all hopes of the traction principle for plowing, and says it can only be done by a windlass. He is now busy inventing a ditcher for open ditch to be attached to his old machine, which he has repaired and has in working order at Decatur. We hear little or nothing about steam plowing at present, and probably all other inventors have come to Fawkes' conclusion that it can't be did by traction engines.

PERSONAL.—H. D. Emery, the junior editor and proprietor of that old pioneer of the Western Agricultural Press, the PRAIRIE FARMER, made us a flying visit a few days since. He was making a tour of observation through the State, and rubbing the rust from his pen which had accumulated through the influence of the damp air of the office during the long winter months. The country air was having a good effect while the Egyptian sun had given him a slight tan and a keener relish for work when he returns to the sanctum. By the way, the roads leading out of Chicago would benefit themselves and add to the amount of farm products that they would have for freight, if they would be a little more liberal to the Agricultural Press. Whatever tends to develop the resources of the country adds to the value of the roads. General Superintendents, be a little more liberal and you will feel all the better and your receipts none the worse for it. In these times when the Agricultural Press must struggle for its existence, lend it your kindly support; you can not afford to give it the cold shoulder; your own self-respect, to say nothing of interest, should induce you to foster this interest.

ILLINOIS STAATS ZEITUNG, a German weekly, published in Chicago, comes regularly to our table. Farmers who have German hands at work for them cannot invest a couple of dollars to better advantage than to subscribe for this journal. It would prevent the men from becoming discontented, and days usually spent at the grocery or lounged away would be devoted to reading. If some of our farmers would take a little of this hint and subscribe for two or three good journals they would be well repaid, their own family as well as the hired help might receive some benefit. How cheerless a fireside is without a single paper to enliven the dearth of news or interest the family. One of our men recently said to us that at the last place where he worked, "only one paper was taken, and that used to kindle the fire as soon as the master read it. When it was stormy, or not much to be done, the master would go to town, two and a half miles, to get the news, but he was too mean to buy a paper, so he asked what was new or read the daily on some merchant's counter." If that man's sons want to go to town to learn a trade or become clerks in some store we shall not blame them.

HOT.—Friday, the twenty-seventh of June, was decidedly a hot day, the thermometer indicated ninety-six in the shade.

STRAWBERRIES, &c.—Our friend O. B. Galusha, in a private letter, says, "Strawberries are just past their prime. Wilson's Albany has borne beyond all precedent, Extra Red almost up to it; one can pick three quarts of it as easily as two of Wilson's; though not quite so large berries it bears in clusters. We can get only eight cents per pound now; have commenced making wine in preference to selling at that price.

"We have bushels of the Houghton and Pale Red gooseberries, but don't know what to do with them. I regard the goosberry as the best berry we have for bottling."

We have the Wilson's Albany and have fruited it to our satisfaction. It is undoubtedly the most profitable market berry, but rather coarse when compared with McAvoy's Superior or Early Scarlet. The Extra Red we have fruited for the first time, and are highly pleased with it.

The Houghton gooseberry is the best for our soil and climate; does not mildew, and bears prodigious crops of berries. We have sold our crop green for two dollars per bushel, while the common wild berry only brought fifty cents.—They are excellent canned or preserved. When fully ripe they are equal to cherries for desert.

MAY CHERRY.—In a letter from F. K. Phinx, of June 21, he says the "Early Richmond Cherry is very fine, and identical with the Early May of Edwards of Cincinnati, the Early Richmond of J. J. Thomas, and the Maxfield Bros., of Geneva." There can be no question in our mind that the Kentish of Downing is identical with the May Cherry, and Early Richmond of Cincinnati, and the Early May of Virginia, and May of Kentucky. At the same time, we must conclude that a spurious sort has been sent out under the name of Early Richmond, from the eastern nurseries, and in many cases the Early May of Downing and Elliott have been palmed off for this variety.

Our object now is to separate the genuine from the spurious, and therefore caution our readers to be careful of whom they purchase,—look out for the peddlers.

WEBBER, WILLIAMS & YALE.—The card of this old and reliable house will be found in our advertising department. We take pleasure in commending them to our readers, their stock is immense and prices low. They will be found near the Illinois Central Depot.

**TAXING OF NURSERIES.**—So long as growing as growing farm crops are exempt from taxation it is a stretch of stupidity on the part of any assessor to tax the nurseries. A crop of nursery products is from one to four years in maturing for market, and as legitimately come under the head of growing crops, as do corn, wheat, chicory, madder, or any other crop, which requires from one to four years to mature. In both cases they are personal property, and as such subject to attachment and sale on a justice's execution. The fixtures of a nursery, like other farm buildings, belong to the realty, such as green houses, packing sheds, etc., while cuttings, plants and young trees belong to the personal. We learn that the assessor of Bloomington has taxed the nursery of F. K. Phinx, but we trust the board of supervisors will see to it that it be stricken from the list.

**FIRST ANNUAL FAIR OF THE STATE HORTICULTURAL SOCIETY.**—This fair will be held during the time of the National Horse Fair and Mechanics' Institute, of Chicago, commencing September 9. The prospect for a large show is very flattering, there being a large crop of fruit in all parts of the State which the liberal premiums offered by the Society will be sure to bring to the exhibition. Nearly all the railroads have agreed to carry passengers at half fare, which, added to the inducement of seeing three fairs at the same time, will insure a large attendance from the country. The Society have secured Bryan Hall, the largest in the city. The exhibition will be open day and evening. We shall allude to this subject more at length in the August number of the FARMER. Don't forget the time—the second week of the National Horse Show.

**STRAWBERRIES.**—The season for this fruit is now past and we can speak fully of the merits of the varied varieties. O. L. Willey, of Madison, Wis., writes us in favor of Brighton Prime, Boston Prime and Eliza, as valuable early sorts, while Walker's Seedling is a superb sort in season with the Wilson, and far better.

In our own grounds, Early Scarlet, McAvoy's Superior, Extra Red, Longworth's Prolific, Iowa, and Neck Pine, have given us great satisfaction. We have never liked the Willson for our own use, it is a coarse acid fruit, and only fit to send a long distance to market. It keeps well and will ripen in the boxes, but for home use we cannot be persuaded to cultivate it.

**HORTICULTURAL SOCIETIES and Farmers' Clubs** should be organized in every school district in the State. Several have already been started and meet with encouraging success. Among the most prominent is the Horticultural Society at Rockford, of which we receive a weekly report through the Register. They offer premiums for fruit and flowers, and also hold regular discussions. A similar society was started at South Pass recently, but with what success we have not heard.

**HARVESTING.**—At this writing—June 28—harvesting has not yet commenced north of Macoupin and Effingham counties. Our rye will be ready by the second or third and winter wheat by the sixth of July. From all parts south we hear of a bountiful wheat crop, and should the grain not be injured north by the fly and rust, we shall look for a large yield there.

**HARD SHELL ALMOND.**—Nearly every one supposes this to be a tropical nut, but like other fruits it has been acclimated north, and will bear a crop of nuts wherever the peach bears. It resembles the peach, both tree and fruit, and is often taken for a peach by persons seeing the trees.

**PERPETUAL ROSES.**—Should have the seed balls cut off as soon as done blooming, and kept well watered to insure a steady supply of flowers. Now is the time to bud them, if you have any old, worthless rose bush. It is performed the same as in the apple, peach, etc.

**CORN.**—Our thirteen acres of corn planted as soon as the ground was plowed, prior to May 1st, has been worked three times with the two horse cultivator, and is already over three and a half feet high. We are looking for a big lot of corn from this piece.

**BEES.**—Our bees are doing remarkably well, this season, as we have plenty of pasturage for them. The moth miller does not seem to be as plentiful as last year, and we hope for a bountiful supply of honey.

**TIMOTHY AND CLOVER** should be cut, if for feed, just as the timothy is in bloom; if for seed a few days later will do.



**A CURE FOR HICCUP.**—You may be the medium of relief to many who suffer from hiccup if you will state in your paper that it can be cured immediately by the mere placing of the palm of the hand of any person upon the pit of the stomach of the one afflicted, and a persistent stare of the eye of the sufferer into that of the one who undertakes the cure. I do not recollect how first I learned this means of cure, but for twenty years I have known it to be a fact, without a single failure.

I will not attempt to philosophize upon it or give a theory. All I know is that I have relieved many, and have been cured hundreds of times as stated.—Cor. St. L. Rep.

—The above is not agricultural, but farmers have hiccups as well as other people. We give the recipe for what it is worth, not having tried it. Our remedy is to hold the right hand extended above the head—a sure remedy in most cases.

**FAWKE'S STEAM PLOW.**—This machine which has for the past three years stood as a land mark on our farm, has gone to Decatur, where the engine is to do duty in making corn shellers. Thus fades the glory of the giant, that was to produce wheat at ten cents the bushel, and inaugurate the millennium of farm labor. The sun browned brow of labor must yet wipe the sweat from its wizen surface, and horny hands stand at a premium.

**SORGHUM** has been planted to a large extent, and if the yield is good the supply of syrup will be very large. It can be made profitable at thirty cents per gallon, and even less where large quantities are manufactured by steam.

**COTTON.**—Not much has been planted in this county owing to the scarcity of seed. Our's is up about six inches and looks fine. In its growth it very much resembles buckwheat.

**RECEIVED.**—The premium list of the eighth annual fair of the Madison County Agricultural Society, to be held at Edwardsville, October 7th, 8th, 9th and 10th, 1862.

**BUCKWHEAT** should be sown from the first to the twentieth of this month. One-fourth bushel of seed to the acre is sufficient.

**STRAWBERRY WINE.**—Several parties write us that they have made more or less of this wine but give us no recipe.

**HOW TO BECOME A WATER WITCH.**—Abraham Clark, of Stoney Brook, Cal., in the California Farmer, tells how a man may become a water witch. He says: "Speaking of making homes in the hills, there are many claims vacant for want of springs of water. I believe water can be found in the hills by digging as well as in the valleys, but I would look for the veins scientifically, that is, with a crotched peach limb, thus, A taken in both hands, firmly, palms upward, and the but-end of the crotch pointing up, then walk on slowly, and if you approach a vein the but-end will begin to turn down; pass over back and forth and you will find the identical spot to dig. The crotch won't work in every one's hands, and some don't believe in it; but I know it to be a fact. Try where you know there is a vein, or pipe of water running under ground, and if it don't work in your hands let others try it. It did not use to work in my hands, but now does. I tried it crossing my own underground water-pipe (of wood,) and it worked like a charm. I found other veins by the same process in different places on my land where I little expected water, which leads me to conclude that there are numerous veins of water in the hills running in every direction, that do not always break out in springs."

Any one ambitious of the power of detecting where springs are found under-ground for the purpose of digging a well, can easily try this experiment. If the power can be obtained in the manner described, it is certainly worth possessing.

TROY GROVE, ILL., June 15.

**ED. ILL. FARMER, Dear Sir:**—I have just read with pleasure an intelligent communication from you on the culture of corn, in the Chicago Tribune of June 12, which corresponds more exactly with my ideas on the same subject than anything I have before seen or heard expressed. The advantage of having the corn planted as soon as the ground is plowed, (plowing should never be done till the ground is sufficiently dry,) I have found, by two years' experience, to be quite as important as you suggest, both in regard to the ground being in better condition for the seed, the corn getting an earlier start, getting ahead of the weeds, and having corn ready to cultivate by the time we are done planting. And as you invite the attention of inventors to the subject, I wish to give you a brief description of a corn planter used by me for the last two years. It is the first corn planter, and so far as I know the only one, ever made that would do its own dropping and plant in check rows.

It consists of a roller seven and a half feet long and two and a half feet in diameter, set in a light frame, with two seed boxes set in the frame three feet in front of the roller. It is very simple, the only connection between the motion

of the roller and the seed boxes being a simple iron bolt driven into the roller and which strikes the end of an iron lever as it comes around—no cog or belt wheels. The dropping arrangement, so far as correctness and reliability are concerned, is precisely the same as that in Brown's corn planter; but no revolving wheel is used as in his. It was invented and used by me in the spring of 1852. I then used it on a breaking plow, operating it by bringing my knee at every step against a cushioned board hung between the plow handles, dropping the seed in the edge of the furrow.

The planter, as now used in connection with the roller, will plant in check rows, or not, as desired. The distance of the hills in the rows can be varied from one foot to four feet. The number of kernels dropped are varied the same as in Brown's.

The arrangement for preventing the variation of the revolutions of the roller which would otherwise render check rows impossible, is entirely new and original and very simple. It also enables the driver to know whether the cross rows are straight or not. No marking or laying off is needed.

In my humble opinion it is an invention worthy of more notice than it has received. Not having the means at command I have never applied for a patent or made any effort to bring it before the public, except to write a description of it to the Tribune, which was not published. Many of my neighbors have seen and admired it, but none who had both the means and the disposition to do anything for it.

Satisfied from the tone of your communication to the Tribune, that you would at least appreciate its merits if made acquainted with them, I have taken the liberty to write you, hoping that you might know some one who would be willing to interest themselves in it. I would willingly divide the profits with any one who would furnish the means necessary to get a patent and bring it before the public.

Respectfully yours, &c.,

J. MOORE.

—We give the above a place, and hope that some one will feel sufficiently interested to aid and assist.

ED.

—A Quarter of Corn is the fourth of a ton, or eight imperial bushels. This is an English measure, not in use in this country, though very necessary to be known, so as to understand agricultural reports.

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CLOTHES WRINGERS.

HALEY, MORSE & BOYDEN'S  
SELF ADJUSTING CLOTHES WRINGER,

Is superior to any other in the market. Being made of wood and India rubber, the clothes cannot be damaged by iron rust, as is liable to be done with those having iron frames. The pressure can also be regulated to conform to heavy and light goods, and there is no liability of rusting out of steel springs. On the whole it is by far the best and most economical wringer yet offered in the market. It will save at least one-third the usual labor in washing.

Every one is aware that the twisting and wringing of clothes by hand, stretches and breaks the fibres; but this machine presses them so even, between two rubber rollers, that a newspaper thoroughly soaked can be wrung without breaking it in the least. Buttons, hooks and eyes, &c., are not injured by it.

In starching it is invaluable, especially on large articles, such as ladies' skirts, &c., as it leaves the starch perfectly even. It will wring a bed quilt or a pocket-handkerchief drier than it can be done by hand, and the most ignorant servant can use it. It can be screwed on to any tub, and only weighs ten pounds. Every housekeeper should send for one and try it. If it does not give entire satisfaction, it may be returned and the money will be refunded.

For sale, wholesale and retail, by

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## PROSPECTUS FOR THE JOURNAL OF THE Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

AGRICULTURE IN ALL ITS BRANCHES, Mechanics and Natural History, as may require early publication.

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All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

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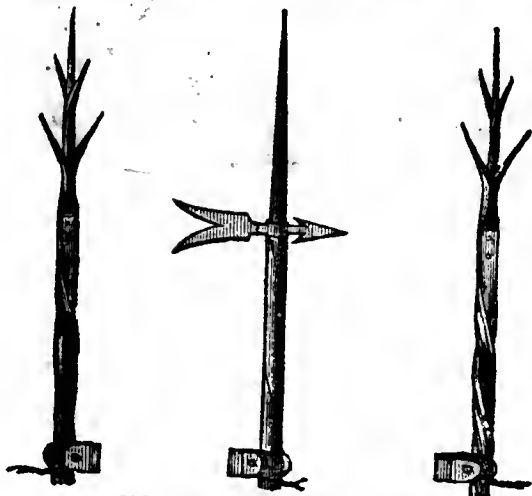
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, AUGUST, 1862.

NO. 11.

## August.

The summer is now culminating and drawing the robes of ripeness about her. The music of the reaper still floats out upon the heated air, but will soon die away in the distant north. Its first notes came up from Egypt, with the summer zephyrs, that kissed the roses of June; for weeks its song was sung to the winter ceralia of that wonderful country, faint and distant at first, but day after day its march, slow and steady, was to the north, and at last reached us; here it met the seried ranks of spring wheat, of oats and of barley, but its march was still northward: onward it went, and now its faint notes come up to us on the north wind, and must now be busy with the cereals that wave along the borders of the great forest that belts in the northern lakes. To the south, the booming of cannon is the music that harvests thousands in the valley of death, and sends back the wail of the widow and the orphan, its notes grow strong as the march is southward, and come back to us in frightful echoes. We have little hopes that it will cease until the banner of liberty shall have been kissed by every breeze that shall come up from the gulf, and the fields of the South drenched with the blood of the sons of the North.

This war, as we predicted, is making great changes in commercial products, in commerce, and in the social condition of the people. Where it will lead, we know not; but its track will be marked with graves. The vast drain upon our laboring population is being felt, for there is scarcely a family but has one or more of its members engaged in it. The culture of cotton in the southern

States is nearly suspended, and an immense breadth of corn planted in its stead. The stock of hogs have been carefully increased and the grown ones fattened to their utmost capacity, thus making a home supply of corn and bacon, which had heretofore been mainly drawn from the West, and in no event will our corn and pork be wanted South before another year, or until cotton shall again become the great staple, when the usual demand may be made upon us, but of this event we must not be too certain, for we must bear in mind that the high price of cotton is stimulating other countries to grow it, and it is not improbable that our own praires may not come in for its quota. The presumption is gaining ground that the old system of farming at the South is about to be broken up and one more rational, more humane, and more conducive to the development of the masses, will take its place. In a late visit through Kentucky, Tennessee and part of Mississippi, we saw no country school house, and but few village academies, where the rich receive not an education, but a smattering of learning. In this way the rich are not elevated, while the mass of the people become ignorant and superstitious, if not degraded. The progress of the world's art has passed them by, and they have not felt the throbs of genius, that for long years has been awaking the mind of man and expanding his field of enjoyment.

If it costs millions of money to plant the district school house throughout the South, it will prove an instrument of inestimable value.

In the mean time, we must take these

changes as they come to us; we must find other markets for our pork and corn. Cotton has been the great medium for exchange for our supply of foreign goods for which we in turn have paid the South in our great staple; now, this being cut off, we must exchange our products direct for such goods as we want, but the war has brought with it the consequent tariff, and thus our profits are lessened and our capacity for exchange curtailed. In this dilemma, we must first produce all that we can for our own use, and purchase as little as possible until the system of exchange becomes more evenly ballanced. We can scarcely afford to exchange corn at twenty cents a bushel for silk at three dollars a yard, or the products of European workshops and artizans at these rates, and yet this is about the present standard. From the appreciation of gold, it is evident that European trade is largely against us, and we must cease to purchase for the time being. We, as farmers, must economise in our expenses, and we will triumphantly weather the storm. We must sell more than we buy, must eschew running into debt, and select the most profitable crops. Now is the time to consider well these changes: first comes the question of winter wheat, of rye, and of meadows; summer has culminated, and we must now direct our future course, what we shall do and how we shall do it; we can not procrastinate if we would, but must move on: the world is moving, and the genius of the age is making vast changes—who will lead them?

---

### Winter Wheat.

Now that corn has sunk to zero in the commercial scale, and as wheat has fully held its own position, it is proper that we should consider the propriety of extending its culture. The fine crop of winter wheat in Egypt will doubtless stimulate to the sowing of a good breadth the last of this month and fore part of the next.

In passing down through Egypt, just

before the harvest, we observed the best wheat where the surface had been thrown into narrow lands, say, of one and a half to two rods wide. Near Tonti, where the prairie is almost level, this plan of plowing resulted in the best of crops. In most parts of the State the same plan would be found valuable and prevent a large amount of winter killing. When the surface is dry and well drained, winter killing is out of the question, but where the surface water or melted snow can stand on the surface, the plants are thrown out.

In plowing for wheat, we would recommend that greater attention be paid to this point. There are some thousands of acres throughout this State in weed fallow that should, and doubtless will, be sown to wheat. Last year, quite a large breadth in the central counties was sown among the standing corn, but this will hardly be available now, as the majority of corn fields will be laid by with an abundant supply of weeds. The want of labor, the lateness of the season, and the heavy rains have produced this result. The corn field will therefore not be in good condition to seed to winter wheat, as a general thing, but where it is practiced we would recommend early husking of the corn, and that the stalks be cut down at once, either with a sharp hoe close to the surface or with some other tool. Winter wheat grows too spindling when shaded with the heavy growth of corn, and hence should have the benefit of the sun at as early a day as possible. The worst possible thing for wheat sown among corn is to leave the stalks standing until spring—one trial of fall cutting will dispel the old theory of allowing them to stand through the winter.

Clover and herds grass meadow are both valuable to be turned over and sown at once, there is no use to have them lay over for rotting, turn under with a heavy furrow and sow the same day if you choose.

A good plan of sowing winter wheat after spring wheat, oats, or barley, is practiced by

Mr. Turner, of Quincy, as noticed in our Farm Committee Report of last year, and that is to plow, immediately after harvest, two or three inches deep, just enough to cover up the stubble, and at the time of sowing plow again six to eight inches, we have no doubt of the value of this plan. In all cases we should plow in narrow lands to insure thorough surface drainage. Under no circumstance would we recommend winter wheat after winter wheat, for such is to say the least a bad practice.

The culture of winter wheat must become more general, as we learn to guard against winter killing, for all admit, when successful, that it is one of the most profitable of all farm crops. A few successive good crops of winter wheat in any neighborhood makes its farmers rich, it is therefore important that we study how to insure its success.

In the selecting of seed care should be had that it be not injured by the threshing machine; it will be found safer and cheaper in the end that the seed be threshed with a flail or tread out with horses, for much depends on the stand and the vigor of the plants. It is the immense shipments of winter and spring wheat from the west that is giving us so much of value in return; it, therefore, stands us in hand that we grow a good quality and at the same time make the crop sure and cheap.

#### State Horticultural Fair.

The State Horticultural Society have decided to hold a Fair, commencing on Monday, Sept. 8th, and to continue throughout the week. It is to be held at the Bryan Halls, in the city of Chicago. This is the largest Hall in the West; is, in fact, a series of two immense halls, one of which will be devoted to vegetables and the heavy garden products and the other to fruits and flowers.

The premium list of the Society covers every object of interest in the vegetable, floral and fruit departments, and is so ar-

ranged that nearly every person can compete for some one or more of the premiums. The committee have been very happy in thus bringing the subject in all its intricate minutia, to the attraction of gardeners, florists and Pomologists.

This is the first experiment of holding a great horticultural exhibition in the West in which a large amount of premiums (near \$2,000) is involved, and we have no doubt that this new stimulus will bring out such a show as has never before been exhibited in any part of the country. Competition being open to the northwestern States, we shall expect to see a good turn out from all points that make Chicago a market for these several products. The Cincinnati gardeners and growers will, of course, be largely represented, more especially in grapes and wines.

Michigan will be largely represented in her peaches, apples and pears. Indiana in apples, vegetables and flowers. Ohio in garden products, grapes and wines, as well as greenhouse products. From Wisconsin, garden products and hardy fruits, while the great prairie State will come up with her wagon loads of vegetables and orchard products, with flowers in masses for the decoration of the halls.

Premium lists can be had of C. T. Chase, Corresponding Secretary, Chicago, and a copy has been sent to every post office in the State. It can not be expected that copies will be mailed to all, and persons desirous of one can apply as above or to any of the officers of the Society.

The Fair will be held the second week of the great Horse Fair, and it is also understood that the Mechanics' Institute of Chicago will hold a fair at the same time. These, taken in the aggregate will form such attractions as have never before been held out in the northwest. The railroads, nearly, or all of them, carry passengers to the Horse Show and Horticultural Exhibition at half fare. We shall look forward to this Fair

with deep interest as showing the progress of horticulture, in our own and adjoining States. Every person engaged in market gardening, in market fruits, and in the sale of flowers, will find it to their interest to not only attend, but to compete for the prizes. Every farmer who intends to plant an orchard, all who have an orchard to cultivate, all who have a garden either for vegetables or flowers, should be present to learn what is best to plant and how best to cultivate. Let it be a rousing Fair of products and of people.

### Fall Plowing.

So soon as the small grains are harvested no time should be lost in putting the plow to work. The stubble should be turned under with a shallow furrow, that the grain shattered out on the ground may come up for fall feed for stock, and to rot the weeds and other trash that covered the surface, besides this, if again plowed in the spring, the plow can go below the old furrow and not turn up, but turn under still deeper the seeds of weeds. Some years since we took a good lesson in this mode of plowing: we deeply fall plowed some three acres intended for spring rape, this we again plowed the last of May. The surface at the time was almost free of weeds and would have done well to have been sown with the rape, but we were bound for a big crop and in went the plow up to the beam, but just reaching the bottom of the fall furrow—the result was the bringing to the surface all the seeds of the last years crop of weeds and unrotted stubble; the rape was sown and the result a fine crop of weeds which soon choked out the rape, but it has proved a valuable lesson both to us and to others.

**CORN GRIDDLE-CAKE.**—Scald at night half the quantity of meal to be used; mix the other with cold water until it is a thick batter; add a little salt and set it to rise without yeast. This will make light crisp cakes in the morning. The skimmings of boiled meat is the best to fry them with. Fry slowly.

**LAMBS DYING FROM WOOL IN THE STOMACH.**—Lambs very frequently swallow particles of wool which, in playfulness, they suck and bite from their dams; to prevent which the dams, when this occurs, should be smeared with a mixture of aloes and water, or assafoetida and water. When they swallow the wool and it gets mixed with curd in the stomach, it forms hard balls that are indigestible; but the administration of a teaspoonful of soda mixed in water twice or thrice a day, dissolves and digests the curd, if not too far gone. Calves frequently die of the same disease, and the only remedy yet found is the soda.

### Monopoly.

The great strides that monopoly is making to crush out individual enterprise in the last year or two, cannot fail to arrest the attention of every lover of the good old times when every man stood or fell on the strength of his own individual merit. What has hitherto been a free avenue of trade and commerce, is now being tried to be blocked up by individual effort, by heavy monied corporations or companies. Our railroads are in themselves heavy monied monopolies, having a sliding scale of freight rates, as the capacity they possess is pressed upon can and do, at their pleasure, fix their rates of transportation to suit the pressure on them for facilities to forward produce. Not content with this, the managers of some of them, give the management of their stations and the station warehouses into the hands of a monopoly that exacts a charge, beside the freight, from every one that offers produce for freighting over their road, thus extorting an unjust charge from the producer or shutting him out from the privilege of being his own consignor. There is no justice in this system of management. All railroads should charge enough in their freight bill to pay all expenses of shipping, give their agents a stated salary for his services, and have their warehouses, side tracks and cars, free to all shippers alike, that would load their car promptly, and not have it as it now is, a system to fence out farmers from shipping their own produce.—*Farmer's Advocate, Chicago.*

—The above, we suppose, applies more particularly to the Chicago and Burlington road, a road that has always, we believe, been managed on the purely selfish plan. Renting of warehouses is a feature that should be discarded at once by the road. It is far better that the road should charge a cent a bushel extra, than to put the warehouses into the hands of those who will monopolize the business. What is wanted at the stations is free trade and equal facilities to all to ship their produce to market. We never sell at the station, but always ship to market, let that



be where it will, Chicago, Cincinnati, or New Orleans, and on the average we have been largely the gainer. We load our own cars and thus have only the freight and selling commission to pay; the profit that falls to the middle man goes into our own pocket. Last month we saved over forty dollars in being our shipper on a single car load of potatoes.

We would always advise parties selling for the Chicago market, to ship to a reliable commission house, on their own account. Two years since we invested fifty dollars in grain sacks to enable us to do our own loading and in which to ship potatoes and select lots of grain, and we have made at least fifty dollars besides the cost of the two hundred sacks. This is not an occasional occurrence, but what we often see an opportunity of doing. After harvest the grain stations swarm with grain dealers, all of whom must make a profit either in a direct margin, cheating in weight, in grade, bad money, or downright stealing of the whole. There is not the least necessity for this class of men. All you have to do is to ship directly to some reliable house in Chicago and have the nett proceeds returned by draft or express. The warehouse men at the stations, as a general thing, are reasonable in their charges, and can assist you if you choose; we have always found them gentlemen, and opposed to this system of swindling. In shipping we prefer to pay them for the work and take the risk of the market ourself. If they purchase, it is right that they should be paid for the risk, and they often lose largely by holding for better prices, thus attempting to speculate. There is little risk in buying and selling from day to day, but always where held for an advance, when interest and storage make fearful inroads into the profits.

### American Pomological Society.

In conformity with a resolution adopted at the last meeting of this National Association, the undersigned, President thereof, gives notice that its Ninth Session will commence in the Hall of the Massachusetts Horticultural Society, corner of Washington and West streets, Boston, Massachusetts, on Wednesday, September 17th, 1862, at 12 o'clock, noon, and will continue for several days. All Horticultural, Pomological, Agricultural, and other kindred institutions in the United States and the British Provinces, are invited to send delegations as large as they may deem expedient, and all other persons interested in the cultivation of fruits are invited to be present and take seats in the Convention.

The present season promises to be the most propitious for fruit that has occurred for many years, and it is anticipated that the coming session, which takes place at the same time with the Annual Exhibition of the Massachusetts Horticultural Society, may be made one of the most interesting which has ever been held by the Society. All the States and Territories are urgently invited to be present, by delegation, at this meeting, that the amicable and social relations which have heretofore existed between the members of the Society, may be fostered and perpetuated, and the result of its deliberations, so beneficial to the country at large, be generally and widely diffused.

Among the prominent subjects to be submitted at this session will be the Report of the Special Committee appointed to revise the Society's Catalogue of Fruits, and thus to ascertain what varieties are adapted to the different sections and districts of our country. The various State and Local Committees who have not already made their Reports on the Revision are therefore solicited to forward them, without further delay, to P. Barry, Esq., Rochester, N. Y., Chairman of said Committee. And it is further requested that all other Reports, which are by the by-laws made returnable to the General Chairman of the Fruit Committee, now deceased, may also be addressed to Mr. Barry, as aforesaid.

Members and delegates are requested to contribute specimens of the fruits best adapted to their respective districts—to furnish descriptions of the same, their mode of cultivation, and to communicate whatever may aid in promoting the objects of the Society and the science of American Pomology.

Each contributor is requested to come prepared with a complete list of his collection, and to present the same with his fruits, that a report of all the varieties entered may be submitted to the meeting as soon as practicable.

All persons desirous of becoming members can remit the admission fee to Thomas P. James, Esq., Treasurer, Philadelphia, or the President, at Boston, who will furnish them with the Transactions of the Society. Life membership, ten dollars; biennial, two dollars.

Packages of fruits may be addressed as follows, "American Pomological Society, care of Mass. Hort. Society, Boston, Mass."

MARSHAL P. WILSON, *President*.

THOMAS W. FIELD, *Secretary*.

—The report on local fruit list for this State will be ready soon and forwarded. We trust

that this State will be represented at the meeting. It will probably be out of our power to be present on account of the business relation that we hold to our State Horticultural Society, but the fruits must go forward from Chicago at all events.

ED.

### Growing Black Walnut Trees.

HOMER, ILL., June 27.

ED. ILL. FARMER, *Sir*:—I conclude to say a word on the subject of raising walnut groves, as it is a subject in which every farmer living a mile or more from the timber should be deeply interested as the time required to raise a grove is not so long but what most any man, let him be ever so old, may reasonably expect to see it grow to its most beautiful, if not useful, proportions. It is true that I have not had much experience, but what I have had may be useful to others. To commence: Last fall I engaged my walnuts (in the hull) at fifteen cents per bushel, and received fifty-two bushels which I had poured down in the field near where I wish to plant them and threw a few armfuls of fodder over them to keep the sun from drying them out too much. The ground in which I intended planting them was in corn, and had been laid by with two furrows in a row. I dropped a walnut to every hill of corn, and on the right hand side of the row so that it would be convenient to break the middle out and turn it over the walnuts. I planted in October in lands of about sixteen rows going up on one side and down on the other so as to have the mole board next to the walnuts all the time. In dropping, the foot should be placed on each one pressing it into the ground so as to prevent it from being rolled out of its place by the horses' feet. By this process two hands will plant about three acres per day—nine or ten bushels to the acre. My object in planting so thick is to get rid of cultivating as early as possible, which will be in about three years; also the thicker they are the straighter they grow. If they are well covered about two-thirds will grow. I committed one error and that was in not getting the stalks off the ground last winter while the ground was frozen, as I find it very troublesome to cultivate among them.

So far as the quality of the timber is concerned there can certainly be no question as to its preference. It will stand as much trapping as any other and is never injured by plowing, and I know of no timber which is more useful for all purposes than the walnut.

Yours, &amp;c.,

P. C. MOSIER.

—We would recommend in all cases of timber planting on the prairie, that it be planted in belts rather than in groves, thus adding shelter to its other values. Black walnuts are certainly a valuable timber, and will make a good orchard or belt in a few years.

ED.

### Kindness to Animals.

Visiting a large Dairy and Stock Ranch in Marion county lately, we were exceedingly gratified to listen to the practical remarks of the proprietor upon the utility and value of kindness to cattle; and having often urged this matter in our columns, we take this opportunity to call the attention of all Dairymen and Stock-owners, especially those who are Dairymen, to the remarks of this humane man:

"In the first place," said he, "I never allow any man in my employ to whip, beat, kick, or abuse, any animal on my farm; as it is inhuman to beat or maltreat a dumb beast, I will not allow it on principle. And again, I wish everybody would act on the same principle, and those who have no humanity, if they would look at the cost of beating cows, they would desist. For example," said he, "let a coarse rough man go among thirty or forty cows at milking time, and begin to speak loud and harsh to the cow he is to milk; or, as such a man will often do, thump or kick the cow, or strike her with the stool, as unfeeling men often do, and that cow and every cow within his influence will hold up her milk; some more, some less. This is an established fact; and every such man among a band of cows will thus take away from the products of the Dairy from three to five gallons of milk daily in a band of forty cows.

"As it is customary for one man to milk twelve or fifteen cows as his portion, these cows will be scattered over the yard or in different stalls, and as he will have to pass among nearly the whole band, they will all feel and fear his influence, and I am confident a man of this character will always lose his employer more than his wages. With this view of the case, I never will keep a man on my premises who is of this character."

We would plead with all Dairymen, and ask them to review these facts, give us their opinions, and copy the example of this humane and wise man, whose words are here quoted, and they will find themselves the gainers largely by a decisive action. If our Dairymen and Stock-raisers would discharge all men who are harsh and cruel to their stock, they would have better stock, more butter, and be in a better condition every way.—*Stock Journal*.

Locusts.—These pests have made their appearance again, in this county, and are more plentiful than they have been within the memory of the "oldest inhabitant." The timber is literally freighted with them. They will undoubtedly do a vast deal of damage to the young timber.—*Page Co. Herald*.

From the Chicago Tribune.  
**Natural History Society—Lecture by  
 Dr. Walsh on the Habits of Insects.**

BLOOMINGTON, June 27, 1862.

Interesting papers were read before the Natural History Society, among which may be especially noticed that of Dr. George Vasey, entitled "Remarks on some of the naturalized plants and weeds of the State of Illinois." An interesting discussion ensued, upon the vexed question between scientific men and farmers, Does wheat change to chess? It resulted, as the discussion always does, in the conclusion that, as a matter of theory, it was impossible for the thing to happen, but that as a matter of fact and observation it did take place.

TO NATURALISTS.

Dr. Frederick Brendel, of Peoria, is preparing a paper upon "The Woods in Winter, and the means of recognizing the trees by the buds, branches, bark, etc." He wishes for aid from naturalists; that those in the southern portion of the State and in the most northern part will collect and send to him specimens of woody plants which do not grow in the vicinity of Peoria. He desires specimens from every season, with flowers, fruits, and branchlets collected in winter; also small cuts of wood with the bark. In this manner can be completed the observations, which may lead to the identification of our trees and shrubs in their winter state. Those who are willing to aid in this project can correspond with Dr. Brendel upon the subject.

THE HABITS OF INSECTS.

The lecture by Dr. Walsh, before the Natural History Society, is deserving of more mention than I can allow myself to make. He commenced by saying that Sidney Smith speaks on one occasion of an "insect with eleven legs, a nondescript with eleven wings, a caterpillar with a dozen eyes in his belly," and those whose business it is to know, every insect has just six legs—four or two, or no wings at all—and, when they have any, their eyes invariably affixed to their heads. It serves as an illustration of the total popular ignorance in regard to "bugs." The natural history of the higher animals is known, in its rudiments, even to children, while that of the lower animals, such as insects, is a sealed book to almost every person. And yet their habits and organization are equally full of interest, and swarms of species are always present; while the number of mammals, birds or reptiles, is exceedingly limited in every locality.

Insects are regarded as contemptible creatures, and yet God has used his power to create myriads upon myriads in such perfection that Solomon, in all his glory, was not arrayed like the very meanest of them. It is, therefore, beneath the dignity of none to study them in all their infinitesimal perfections. Great and small are but so by comparison. The earth to the sun is but a mustard seed to a melon; and the sun sinks into significance by the side of the starry suns in the sea of space. There is no reason for the

popular opinion that entomology—or the "pursuit of bugs"—is a frivolous pursuit.

What is the utility of this pursuit? A moderate knowledge of insects oils the wheels of daily life. History records authenticated "show-ers of blood," bringing fright and dread. They came from the red coating of a butterfly—"the painted lady"—several allied species of which are found in Illinois, and may, at any time, give rise to similar phenomena. Another butterfly—the morning clock, so called from its being black with a cream-colored border—was introduced into this country from Europe with some Lombardy poplars. In New England the people somehow thought its larva was poisonous, and groves of poplars around dwellings were destroyed in consequence of the mistaken notion. A woolly or plant louse ravaged the apple orchards of localities in England. A similar looking louse, appeared on the poplars, and it was thought that the orchards destroyed came from poplars, and all the poplars were cut down. The two moths were of different species and the proceeding was an outrage, doing immense injury, working no good. The female of some moths has no wings, and has to *crawl up* the trees. Tarred bandages properly applied to the trunks prevent harm from these, but this proceeding, as against the canker worms, is only a humbug, and yet thousands of dollars have been spent in placing the most approved leaden troughs filled with oil, etc., to guard against the latter. These are mentioned out of a long catalogue of instances at hand of a similar character.

When it was determined to plague the Egyptians, lions, tigers, and "that ilk," were not sent, but flies, lice and locusts. The great American plague, appearing annually, is the plague of insects. America is known as "the land of insects!" The annual destruction of wheat in New York by one insect—the wheat midge—is calculated at \$15,000,000. For every dollar's worth of wheat the New York farmer harvests, this midge takes a dollar's worth, being one-half of the crop. This midge comes from England, but there it is recorded that in the worst year of the ravages, only destroyed one-twelfth of the crop. And yet while Europe invests regularly and constantly vast sums for a knowledge of the means of protection against insects, America requiring more, is a niggard in this regard, mainly because it does not know and appreciate the value of such knowledge, and the valuable results flowing therefrom.

Mr. Walsh then pointed out the manner in which entomological investigation discovered the means of checking the ravages of insects, and urged in strong terms the necessity of a system fostered under the auspices of state or national charge. He referred to his own researches in regard to the army worm, and the means he had ascertained of guarding against it successfully and fully. He referred to the fact that as the lines of temperature did not conform to the locations of insects, the investigations made by other States did us but little benefit. Of the chinch bug, so common here, Dr. Fitch, in his twenty-five years's study, had met with only *three* in the State of New York, and Dr. Harris only found *one* in the State of Massachusetts.

The lecture was listened to by a large audience. The time consumed seemed short, so great was the interest taken. Mr. Walsh has the rare ability of presenting scientific matters clearly, and popular. With the exception of Agassiz, he is probably the best popular scientific lecturer in this country. He lectures not to "get up a lecture" and gain applause, but to impart information, and carries conviction because he believes every word he says and believes also that the subject he is talking about is the most important subject in the world. A lecture from him is always eagerly sought for and always received as a treat and a luxury.

**ABOUT CORNED BEEF.**—When beef is fresh it contains considerable blood, which is drawn out by the brine. If the meat is left in this bloody mixture, it will require a much larger quantity of salt to preserve it, particularly through warm weather. My plan is to make a brine by using for every hundred pounds of beef, five pounds of salt, one-fourth of an ounce of saltpeter, and one pound of brown sugar. This is dissolved in just enough water to cover the meat, and poured upon it. When it has been in this brine two weeks, I take out the meat, let it drain, pour a fresh brine over it, and then it will be good the season through.

The cook who uses corned beef should not be so ignorant or so indolent as to delay putting it over the fire until an hour before dinner. A good sized piece requires three or four hours steady boiling to do it justice. Insufficient boiling must be made up for by extra chewing. Always have the water boiling when the meat is dropped in; otherwise the sweetness will be drawn out into the water. A boiling heat hardens the outer surface at once, and thus keeps in the juices which give richness, and which contain most of the nourishment. An excellent way of cooking corned beef is to have a large boiler with a wire or wooden rack on the bottom for the meat to rest over the water. When the water boils, place the meat upon the rack and put on the cover of the boiler with a cloth over it to keep in the steam. The heat of the steam will rise above the boiling point and penetrate the meat and cook it more quickly and better than could be done by boiling.—Am. Farmer.

**MANAGEMENT OF THE DWARF ALMOND.**—In connection with a part of your introductory article in your March number, giving directions for pruning shrubs and climbing roses, please allow the writer to state the plan which he has successfully pursued in flowering the double flowering almond, which, when properly managed, is one of the most beautiful shrubs, but, as it is usually grown, is an unsightly plant. The extremities of most of the previous growth almost invariably being partially killed, the plant becomes unsightly, producing but few straggling flowers. To insure success, the whole plant should be annually cut down to the ground as soon as the flowers have lost their beauty. This will induce a strong growth of new shoots, many of which

should be stopped, leaving a few of the strongest, from which to get a magnificent show of flowers.

Precisely the same treatment is pursued with the prairie roses, and the shoots which, on strong plants, will grow to the height of twelve to fifteen feet, when trained to a pole, present a far neater appearance than when, according to the common mode, the old wood is allowed to remain on the plant.—*Gardener's Monthly*.

**EFFECT OF A HAIL STORM.**—On the farm of J. B. Phinney, the effect of the terrible storm that passed over it last July, are still visible in the dead trunks of the trees of the fine young orchard, and ornamental grounds he had started. Every vestige of green leaf above ground was entirely destroyed at that time. Whole wheat fields then in bloom were left as clean as though just plowed. To see it now, except for the blackened and scarred trees, one would scarcely detect the ravages. Many of the trees have sprouted up very vigorously from the ground, and where entirely killed new ones have taken their place. The Osage hedges cut down into the ground are sprouting out, and doing well. Clover fields cut off clean, have rallied, and now present a splendid growth in full blossom. Such instances illustrate something of the recuperative power of these virgin prairies. But we shall always hope our farmers may be spared such visitation as was Mr. Phinney's lot last year.—*Editorial Cor. of the Prairie Farmer, from Champaign*.

**A NUT FOR GEOLOGISTS.**—In Macoupin county, Ill., recently, the bones of a man were found on a coal bed, capped with two feet of slate rock, ninety feet below the surface of the earth, before the run cut any part away. The bones when found were covered with a crust or coating of hard glossy matter as black as coal itself, but when scraped away, left the bones white and natural.—*LaSalle Press*.

**BARREL MEASURE.**—Rice, 600 lbs; flour, 196 pounds; powder, 25 pounds; cider and other liquids, 30 gallons; corn, 5 bushels, shelled. By this latter measure crops are estimated, and corn bought and sold throughout most of the Southern and Western States. At New Orleans, a barrel of corn is a flour barrel full of ears. In some parts of the West it is common to count a hundred ears for a bushel.

**HOGS AND CURCULIO.**—It is the practice of many to allow their hogs to run in the orchard and gather up all fruit as it falls. In this way the insect is not allowed to leave the fallen fruit and perpetuate its species in the ground. If no hogs are about, the fruit should all be picked up and destroyed before the insect leaves it.

—Green corn forms a part of the soldiers' rations at Memphis.



### Wickersham's Excavator.

When at Springfield, a few days since, we were shown the above machine, now nearly ready for operation, and, as the inventor thinks, as near perfect as it can be made.

Mr. Wickersham has been to work on this machine since 1854, when, if we recollect, he had one on exhibition at the State Fair, but quite a different affair from the present one. The *Union Herald* of that city says of it: "The operator, with this machine, is able to cut, in one day, a ditch half a mile long, five feet wide, and two feet deep; it being at a cost of four cents per rod, or in that proportion; for ditches of greater depth, as follows:

"One plow team, \$2.50; one double team and shaft horse, \$3 00; one man to tend the machine, \$1.00, making \$6.50 for 160 rods. It will throw the dirt on either side of the ditch, or, if desired, by cutting two ditches and throwing the dirt to the center, will make a beautiful wagon road, hedge row or fence row; it is, also, most economical in excavating or grading for railroad purposes, or it may be attached to a cart at an expense of about a dollar, in which case, the dirt is deposited directly in the bed of the cart, which is loaded in about half a minute; when loaded, the cart is driven off and another takes its place. This machine will keep from eight to twelve carts constantly moving (according to the length of the haul), at the same cost per day, with the additional cost of one boy to every two carts. This machine is very simple in its construction, it being entirely without complicated work of any kind, and not liable to get out of order except the possible breakage of the endless chains and elevators, which can be made of any reasonable capacity as well as the scraper that fills them.

"The propelling power of the machine is two cast-iron truck wheels, four feet in diameter, on a stationary axle, around a cylinder. Between these wheels runs the endless chains, thence overhead, a round pulley under which is another endless belt which receives and conveys the dirt on the bank when ditching; upon said chains and two feet apart and bolted firmly to them, there are fourteen elevators made of heavy sheet iron; directly behind the wheels and of the same circle, is a heavy iron scraper attached loosely to each end of the axle, and rises and falls with the wheels to suit the surface; when in motion, the wheels running each side of the furrow, and the scraper pushing the dirt lightly into the elevators which carry it up as before

mentioned. This is all the machinery there is in it except the necessary frame work to hold it together. Only one man is required to attend its entire operation." The machine looks as though it might be useful in excavating for railways and roads, but of its value for farm ditching we have less faith, though in the making of open ditches, where the ground is dry and in good condition to plow, there is no reason why it will not work to good advantage. Open ditches on farms are becoming more and more unpopular and the blind ditches, either mole or tile, are rapidly taking its place. The open ditches takes up too much space, are generally filled with weeds, and soon become the eyesores of the farm, while on the other hand the blind ditches are out of sight, the surface can be cultivated and no long rows of weeds are seen. Wherever it is practicable we recommend the covered drain. Should this machine work as well as anticipated by the inventor, it can be so modified that it will cut a deep, narrow ditch for tile, but more particularly valuable for covering and filling with stone, as the width can not be much if any less than a foot on the bottom.

One of these machines is to be at the State Fair where it is to have a through trial, and we shall be disappointed if it does not, in many respects, prove valuable.

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**MORE SHEEP FOR WINNEBAGO COUNTY.**—We colled a few days ago at the farm of Horace Miller, Esq., of New Millford, to take a look at his Suffolks, Leicester and other grades of hogs. Mr. Miller himself, we learned from his son, was absent in Michigan to purchase a large lot of sheep for himself and some of his neighbor.

We were shown a buck now belonging to Mr. M., of a cross of Cotswell and Southdown, which had sheared a few days ago a fleece of 12½ lbs. of wool, and the animal himself, after shearing, weighed over 200 lbs.

Mr. Miller has, as usual, a large stock of hogs, of the most improved grades—about eighty of which are large store hogs, and about as many pigs.

—We copy the above from the *Rockford Register* to show that it is sheer nonsense to send out of the State for hogs. The State of Illinois to-day can show better hogs than any State in the Union; we have just as good Chester Whites, just as good Berkshires, just as good Suffolks, and, on the whole, a little better than can be got up outside of Suckerdome. If any one doubts this let them come to our State Fair and they will have the conceit taken out of them.

Ed.



## Weeds, and How to Get Rid of Them.



Weeds are everywhere in the corn fields, in the fence corners, in the garden, in the flower border, and most luxuriant in the weed fallow—here they loom up in giant proportions. We have a dozen acres or more of this unoccupied land besides headlands and incidental patches, which no common plow, unaided with other implement, can turn under, but with the aid of our weed hook are doing it so nicely that we can not resist the temptation of again giving the cut to our readers, as above. The cost of it is but little over a dollar—perhaps two, if well made. From the demand there must be in wet seasons like the

present for weed killers, the plow makers would do well to keep them on hand. They must be got up right or they are of little use. After several attempts we have the pattern and will send it to any plow maker who will return it and pay the charges both ways. With it we can turn the longest and biggest green weeds directly under the furrow out of sight, where they will quickly rot and thus fertilize the land. For the turning under of a crop of clover, Hungarian grass, or buckwheat, it is just the thing. No farmer will do without one after he has once seen it at work. It has not been patented.

## Dandelion Coffee.

This preparation, made from the best Java coffee, is strongly recommended by physicians as a superior nutritious beverage for general debility, dyspepsia and all bilious disorders. Thousands who have been reluctantly compelled to abandon the use of coffee, will find they can use this combination without any of the injurious effects they formerly experienced. The pure dandelion coffee can be had at Wilson and Irwin's.—*Attica Ledger*.

—That is cutting it rather fat, Mr. Ledger. The idea that this preparation is made of pure Java is all bosh, as there is not an ounce of Java in a ton of it, but it is made of pure sugar peas, and not even warranted against the pea bug, which may possibly give it the flavor of dandelion, but otherwise there is neither dandelion or Java about it, and any physician who recommends it, is either a humbug or is sold himself. Should the "fool killer" come around we fear some of our M. D.'s would need to invest in pine coffins.

Being at a village store a few days since we observed on the end of a box "Pure Coffee, 16 Cents." On looking into the box we saw packages labeled "1 lb. Pure Roasted Coffee," Such barefaced, downright swindling is almost too bad, yet it reminds us of a principle in law in

regard to slander, it being laid down that charging a person with doing an impossible thing was no slander—calling a person simply a thief is slander of the deepest dye, but to charge him with stealing a saw mill is no crime; so in this case, should any of this so called coffee come up missing, and some innocent person be charged with the crime of stealing coffee, it would be no slander from the fact that the thing was impossible.

It is astonishing that people will swallow such a transparent humbug. Pure ground and roast-coffee at sixteen cents, at retail, when a common article of Rio can not be purchased by the sack for less than twenty cents. Can not our village mechanics and other gentry avail themselves of the use of figures. Will not some philanthropist make them a present of a slate and pencil. Great is humbug, and great the impudence of the coffee roaster who has the boldness to thus dupe an innocent and confiding people. The army has lost a valuable sutler by his remaining in private life. Dandelion coffee! how romantic the name, how redolent of early spring, when we are to eat bitter herbs to correct the bile that lazy winter had gathered in our systems. Why not add to this cowslip coffee, for a diuretic and

appetizer? The "pure coffee" noted above, is probably invited for the long days of summer, and so cheap that the poorest can have coffee to drink.

### Milking Cows Once, Twice and Thrice a Day.

We copy from that valuable paper, the *American Stock Journal*, a most exhaustive chapter on the above subject, to which we invite the careful attention of our readers. Ed.

For many years it seems to have been taken for granted as settled, that the number of times a cow should be milked in twenty-four hours, should be according to the time occupied in filling her bag, or the number of times the udder requires emptying, because, as with any other vessel or receptacle of fluid, the filling process must be suspended unless room or space be provided as a necessary condition for the filling of the bag to proceed, without perceptible intermission.

Recently, however, there has been a lengthy discussion, pro and con, as to the propriety of milking only once a day; the cons far outnumbering the advocates of innovation on the general custom in this respect; but the disputants, so far as I have been enabled to perceive, on one side as well as the other, are completely overriding the merits of the question with an unanimity as complete as ludicrous. For instance the critic "Quercus," of the *Country Gentleman*, says, "he never could see that milking once a day could be of any advantage, because it always tends to lessen the flow of milk, or dry up the cows." I quote from memory, and give the substance merely. But this reviewer is not so well posted on this subject as on matters of horticulture, I infer. For milking once a day only, does not always lessen the "flow" of milk nor interfere with the secretion either, and in certain conditions, which occur annually in the experience of almost every person who keeps cows to milk, the tendency to "dry up" is not increased by milking merely once instead of twice daily. As, however, I have said that, in a recent long discussion upon it, the merits of the question were passed over, I may here refer to several points necessary to be included, to a full view of the subject. It is not natural for cows to have large bags, or to carry all the milk they have in twelve hours, less or more, in their udders at one time. In a state of nature, the calf always keeps the bag well drained, by supplying itself therefrom eight to twelve times during the day. Hence the udder would naturally never become large by tension, either from fullness or otherwise, except by disease. Yet the cow might, and on as much good feed probably does, in some instances make as much milk without any show of bag, as she could with. The udder, being a muscular sack, is capable of being much increased in its size by mechanical force, and the whole practice of milking cows periodically, as is the general custom, is based upon this fact, or faculty in the natural

capacity of the cow kind, whatever the result to civilization.

Naturally the udder has constant and complete contractile force, like the muscles of the hand, the leg, the eye, the bladder or any others. But as the natural practice of secreting milk is diverted from its original purpose, to gratify the taste, or promote the convenience of man, the udder is enlarged by excessive or unusual filling and straining, till it attains a large size; and, instead of contracting as it does when often emptied by the calf, it loses, gradually but surely, its original contractile power. The bag being filled as it soon is at the height of the grass season in June, remains full for some time; long enough, certainly, to destroy, in most instances, the power of the muscles to contract, and thus reduce the interior space, as well as the exterior size of the sack or vessel. Consequently, when a cow in her prime as a milker has been milked afresh, there is ample space in her bag for milk to flow into; and until this space is filled the flow of milk is neither arrested nor improved. The udder itself has no influence on the making of milk, whether more or less, except it be so full as to choke up the milk veins by repelling or not receiving their contents as it flows forward and downward to the natural receptacle provided for the young to receive it from, that is, the udder.

In most of the markets of England, in Holland, and elsewhere, the cruel practice of "stanking" used to prevail—for centuries probably—until the more benevolent opinions of recent times brought it under the interdiction of the law against "cruelty to animals;" and, in my opinion, very properly so. For, though this practice of passing a milking by, or not milking at the usual time, in order to have the udder strained or swollen to an unusual size, gave the semblance or show of a large milking capacity, the capacity itself, or the function of secreting milk must have been seriously interfered with, and somewhat curtailed by the process, and every repetition of it, just as, in every part of this country, cows have their milkmaking capacity impaired and reduced by their accidentally "lying out" in the woods, in the road, or wheresoever they may happen to wander.

If, however, milking only once in two days, whether accidentally or by design, reduces the quantity of milk, while weakening the muscles of the udder, both of which must inevitably happen, does it follow that milking twice a day is absolutely as necessary in December as in June; with limited dry feed as with abundant succulent herbage; in the "dead of winter," the season of comparative stagnation, as in the height of the dairying season with a full bite of grass at midsummer? If circumstances alter cases, surely there is here a sufficient variation and difference in circumstances, and in those affecting the quality and quantity—the latter the most of course—of a milk cow will give in December as compared with her yield in June, or warrant and even justify something like a corresponding change in the emptying of the sack-like receptacle provided for its temporary conveyance!—When there are swollen streams and a rush and increase of water, the miller raises his flood-gate

and lets off the excess; when there is no excess it goes through the usual channels in the usual time. But, as happens generally with milldams, as with cows' udders once a year and often twice, the supply of fluid is much diminished, water and milk both are reduced, are the usual degrees and modes of outlet in the same period of time, required? Whether the dam be full or empty makes no difference in the quantity of water flowing in, or the source whence it comes, provided there be space to receive it; and is it not so with the milk-giving cow generally, exceptions proving the rule?

Milk being a secretion from the blood, and as much a product of digestion therefore as the blood itself, it follows that the quality and quantity depend on the character and quantity of the food really and completely digested by the animal secreting it. After blood has been transformed into milk, and has flowed into the milk veins, its formation specifically either as to quantity or quality has been completed and ended. The large milk-veins are simply channels for conveying it to the udder, as the Hudson and Potomac convey what they have received—but not received—from their feeders into the ocean. We sometimes see cows with the milk-vein as it is called, over-full; but this happens only when the udder itself is full. By its natural gravity milk descends to the udder as water down stream. When the milk-veins are unusually full, the udder must therefore have been already filled, and as the milk-veins can not become excessively filled till after the sack or udder itself is full, the former is always both a sign and consequence of the other. If, as for instance in June and July as compared with October and November, the milk-veins are fuller in the former than in the latter months, it is because more blood is made, and this from more food being consumed and digested. But the same high degree of heat which forces a rapid growth of succulent herbage and feed, causes its absorption of a larger proportion of water, which causes the fluidity of the blood, and makes it flow with more ease and rapidity in accordance. Hence, though more milk be secreted, its flow through the milk-veins is more rapid in correspondence, and, as before intimated, the latter will not become over-full unless the bag itself be first filled. If, therefore, the milk-veins become at any time unusually full, it is an indication that the bag itself is full, and, of course, that the cow needs milking, if it be the purpose to increase or even maintain her present yield of milk, whatever be its quality. So far, then, from agreeing that milking twice a day, as a mere matter of routine, is necessary to maintain a given yield of milk, I dissent from any such indiscriminating proposition.

The truth of the matter in a fair practical sense seems to be something like this: A great many men are engaged in bungling thereat and writing about it, who do not understand this branch of agriculture,—who will not or can not discriminate. Manifestly, the milk in a cow's bag has no connection with or influence upon the quantity of milk secreted—unless as happens with heifers in some instances, when their dams have not been milked to their full capacity—the bag has not

been milked to their full capacity—the bag has not lost the power of contraction which is characteristic of a natural state. But where cows have been milked through an ancestry of several generations, and their udders are artificially enlarged by mechanical tension long continued, the power of contraction will seldom be found in any considerable degree in cows of full growth, used for dairy purposes.

Whatever the size of the udder of a cow may be, so long as it is not quite full, the contents of the milk-veins can freely flow into it. If it is only half or two-thirds full, the flow of milk into it will not be obstructed any more than if only a quarter or one-third full: that is upon the supposition that the udder has lost its power of contraction by the unnatural force and strain of carrying half a day's secretion of milk, continued and repeated day after day, and season after season.

There are a few cows that need special treatment in order to dry them up before calving; but not many require it. If these have their milk reduced by milking once only instead of twice a day, a very large majority dry up in opposition to your wishes, and in spite of your efforts to prevent it. In most instances, therefore, milking once a day is an accommodation of circumstances, the deviation of time and labor to one milking, which if duplicated would not be compensated by the quantity or value of milk obtained; and as to drying cows up, it is usually in consequence of their giving less milk from other causes, that milking but once a day is made to suffice.

But it sometimes happens with critics—and quakers too—that, as in this instance, they put the cart before the horse; and, in assuming to settle, they merely confuse.

Whenever a cow's udder is nearly full, she should be milked, if it be desired to continue or increase her yield; for when in a young cow the blood is much of it diverted in this direction, the tendency to milk-forming may be considerably increased by mechanical training in addition to suitable food. In the winter, only such cows as are managed and fed specially for winter dairying or milking will fill their udders quite full, whether milked once or twice.

The number of milkings should be determined by this sign: if the udder does not quite fill with milking once, two milkings are not necessary. If it does fill, the cow should be milked twice. The bag must lack a little of being full in order to afford space for the milk-veins to empty their milk into.

In regard to milking three times a day, the practice may be made to increase the quantity of milk obtained very materially in certain cases, though with a small minority only of the total number cows. There are some cows that have weak teats or valves, so that they can not hold their milk when there is a fresh bite of grass. It must be evident that such cows should be milked thrice daily, in order to save all they make, whatever that may be. There are others with small bags, but with great general muscular force, and strong and rapid digestive powers. These fill themselves; digest their food, and fill their bags

in less time than those of less vigor and activity. They make blood and milk fast, and have therefore more time to rest and thrive. If such animals were milked three times a day, their bags would cease to become full, or to get larger, they would be better dairy animals, instead of "running to flesh" so much. As to all cows that would fill their udders three times a day, as this depends upon the capacity to digest food, and activity and rapidity in procuring and consuming it, each case can be best, and most of them only decided by special trial for the purpose. But some general rules for all cows, in summer and in winter, appear to be that their bags should never be allowed to remain long full, and seldom to become so full as not to afford space for the milk-veins to empty into the udder by an easy flow.

Say a cow's bag should not be allowed to remain more than seven-eighths full; that the capacity and treatment of each cow varies, and to get the full benefit of the former, the latter must be adapted to it. The udder should be drained of its contents as many times a day as the secretive function will refill it. In many cases in winter this will be once only in twenty-four hours. In most instances two milkings will be ample from the middle July forward, or even before. In a few instances, and while milk is in a profitable demand for whatever purpose, three times a day will be found none too often to accommodate the full capacity of the best cows, and supply, at the same time, the largest returns by the greatest consumption of raw material, for the public use and convenience.

It is a fallacy to suppose something can come from nothing; hence the consumption of food will be larger if the yield of milk is great. If some cows supply more food than others with an equal quantity of grass food, it is because they have stronger digestive powers, which always presupposes and involves—contrary to amateur teaching a practice—the greatest activity of the natural functions, and the fullest use of the natural elements, light and air, by means of unrestricted locomotive exertion. TAMWORTH.

**RHUBARB WINE.**—We take the following recipe from the Farmer's Journal, of Lower Canada. Trim off the leaves and grind and press the stalks in any cider mill. To each gallon of juice add one gallon of water and six pounds of refined sugar, and fill the casks, leaving the bungs out. A moderately cool cellar is the best place to keep it. Fill up occasionally either from juice kept on purpose, or with sweetened water, so that the impurities which rise to the surface while fermentation is going on, may be worked off. When sufficiently fermented, which will require from one to two more months, bung tightly and let it remain till winter, when it may be racked off into other casks or bottled. Some persons refine it before bottling, by putting into each barrel two ounces of isinglass dissolved in a quart of wine.

#### ANOTHER METHOD.

Cut the rhubarb into small pieces, put it into just enough water to keep it from burning, boil

until quite tender, strain through a coarse cloth. To one gallon of this liquid, add two gallons of water; to each gallon thus made, put four pounds of sugar, ferment in an open vessel forty-eight hours, then take off the scum, and add one pint of best brandy to every four gallons, after which put it into an air tight cask; then let it remain six months undisturbed when it will be ready for bottling. In each bottle put one raisin, and seal the bottle well.

#### From the Journal of the Ill. State Ag. Society. Illinois Coal.

ROCK ISLAND, June 2, 1862.

MR. EDITOR: It is said by geologists that it is no use digging for coal any lower down than what are called the coal measures, because no workable bed of coal has never been found below those strata.

A discovery has just been made in this city of Rock Island, which almost, but not quite, flies in the face of the above geological maxim. Boring for water at our depot, in the Devonian limestone, they have come to a bed of pure Bituminous coal, twenty six inches thick, 122 feet beneath the surface. If it had only been a foot or so thicker, it might have been worked with profit and every Rock Islander might have sunk a shaft under his own kitchen floor and dug his own coal, a hod full at a time, just as he wanted it.

Four years ago I was talking to some men who were boring an Artesian well in the Devonian limestone at Davenport, and they told me that eighty feet below the surface they had passed through one inch of pure coal, and, further, that in digging another well at the Davenport depot they had formerly met with two inches of pure coal seventy or eighty feet from the surface. The Davenport depot lies about three-quarters of a mile from ours, and the other point where they dug in Davenport about a mile north-west, and, according to the railroad levelings kindly furnished me by the chief engineer, Mr. Brayton, the first point is eighteen feet and the second about twenty-eight feet higher than the level of our Rock Island depot. Consequently this would place the two Davenport coals from sixty to seventy feet higher than ours. Our strata dip considerably to the south, how much, exactly, I do not know, but I should think the difference in the level of the Davenport and Rock Island coals would be about the same as the dip, and, if so, they probably form one continuous seam, thinning out as it travels northwards.

Prof. Worthen suggests that the men may have passed through some such caverns in the limestone, subsequently filled with coal during the carboniferous period, as have been discovered in river bluffs by the Iowa geologists. It may possibly be so, but the chances are greatly against coal being deposited in three different spots in three different caverns so as to lie so nearly, in all three, in the plane of the dip.

Sir Charles Lyell (Elements, p. 441,) says that that the Hlandillo rocks in Dumfries, Scotland, contain beds of anthracite, but how thick those beds are he does not state. Now, the Hlandillo



rocks belong to the lower Silurian formation, and consequently underlie both the Devonian strata and the coal measures; and if the Scotch have Silur an beds of anthracite, I see no reason why we should not have Devonian beds of Bituminous coal.

Below will be found a table of the borings at the three different points, taken down by myself from the mouths of the operators.

I suppose friend Worthen will consider that I am stealing his thunder by writing about coal, but he must take his revenge by writing just as long and just as dull an article about bugs.


BENJ. D. WALSH.

ROCK ISLAND DEPOT.

	Ft.	Inches.
Limestone.....	117	0
Shale or impure coal.....	00	6
Sandstone.....	5	0
Slate-colored limestone.....	1	6
Coal.....	2	2
Sandstone.....	6	0
Light brown limestone.....	10	0
White limestone.....	10	0
Light grey limestone.....	10	0
	162	2

Legal Weights and Measures.

Articles, bu.	Ills. lbs.	Iowa. lbs.	Cin. lbs.	St. L. lbs.
Apples, dried.....	24	24	25	24
Bran.....	20	20	20	20
Barley.....	48	48	48	48
Beans, white.....	60	60	60	60
Beans, castor.....	46	46	—	46
Buckwheat.....	52	52	—	52
Coal, stone.....	80	80	80	80
Corn, shelled.....	56	56	56	56
Corn, ear.....	70	70	—	—
Cornmeal.....	48	—	—	—
Hair, plastering.....	8	—	—	—
Lime, unslacked.....	80	80	—	—
Malt, barley.....	38	—	34	38
Malt, rye.....	—	—	40	—
Oats.....	32	35	33	35
Onions.....	57	57	56	57
Seed, Timothy.....	45	45	45	45
Seed, Hungarian.....	48	—	50	—
Salt, coarse.....	51	50	50	50
Salt, fine.....	55	—	—	—
Sand.....	—	130	—	—
Turnips.....	55	—	—	—
Wheat.....	60	60	60	60
Peaches, dried.....	33	33	33	33
Potatoes, Irish.....	60	60	—	60
Potatoes, sweet.....	55	46	—	—
Peas.....	60	—	—	—
Rye.....	56	56	56	56
Seed, blue grass.....	14	14	10	10
Seed, clover.....	60	60	62	60
Seed, flax.....	56	56	56	55
Seed, hem.....	44	44	42	44

 Nine Spanish Merino sheep were sheared at St. Johnsbury, Vt., a short time since, the aggregate fleeces weighing ninety pounds and two ounces. The fleece of one of the above—a two-year old—weighed 16½ younds. A yearling 13¾ pounds.

Preserving Fruits.

The *Agriculturist*, for June, has a good article upon preserving fruits, in which it speaks of putting up fruits in jars as follows :

During the past years we have kept several bushels of fruit of different kinds, always in good condition, and the portion now unused is almost as fresh and delicious as when first packed. For keeping we have used all sorts of glass bottles and jars, holding from a pint to two quarts each—including geveral of the patent jars with caps of various patterns. Among these were a dozen glass jars with India rubber rings expanded by a compressing screw, of which five gave way and the fruit was lost. Of the common glass bottle and jars we have not lost one.— There is hardly a glass bottle of whatever form that can not be turned to account for preserving fruits, even junk bottles, sodawater bottles, jars, etc., etc. She best form is a wide mouthed quart bottle or jar, the neck drawn in, to give a shoulder for the cork to rest upon. For the larger fruits wide necked bottles are needed; for the smaller, berry frusts, narrow neces answer perfectly.

PREPARING THE FRUIT.

Our method is to put the fruit in a preserving kettle, of some kind—a glazed iron kettle, or a thin one, or a tin pail will do, and sweeten it with just sugar enough to fill it for the table. The sweetning is added in the form of a syrup made by boiling from one to three pounds of sugar (usually two pounds) with one quart of water. Tho more juicy fruits, such a strawberries, require less syrup, while pears and quincies require moro. The fruit is heated with the syrup just long enough to scald it through. Some prefer to use less sweetening and add more when the fruit is to be used. Others use no sugar, they think the fruit keeps just as well, and preserves its aroma better without any sugar. We prefer to use all the sugar that the fruit will keep more certainly, and it is then slways ready to pour out upon the table. The fruit to be preserved should always be in good condition, ripe, but not ever-ripe, nor containing any decayed portion. Tomatoes are peeled, and then cooked down one-half, as this makes a better sauce and requires less bottle room.

TO BOTTLE THE FRUIT.

The bottles or jars are thoroughly cleansed and each one fitted with a stopper. For these, soft corks are the best; but they may be made of soft dry wood. For each bottle or jar we provide a little tin “patty pan” coating one half to one cent each by the quantity. Teasaucers will answer.

The patty pans are simply circular pieces of tin, stamped in the form of a cup or plate, two to three and a half inches across. We buy them at wholesale for 87 cents or \$1.25 per. But any kind of cup to hold the wax will answer. We have seen the common blacking boxes used, bottom for one jar or bottle, and the top or cover



for another. Blocks of wood or bits of board, cut out into a cup form with a gouge, or bored only part way through with a large auger answer every purpose. They should be partly filled with cement, before turning the bottle into them.

For cement we heat together in an old tin basin or iron kettle, one pound of rosin, and one and a half to two ounces of tallow. This may be mixed in a quantity, and melted from time to time as wanted. We formerly used a little over one ounce of tallow to one pound of resin, but one further in experience is in favor of softer cement, when the fruit is stand in a cool cellar.—While the fruit is being heated as above described the bottles are well warmed by setting them near the fire and frequently turning them; or better, by setting them in cold water in a wash boiler and heating to the boiling point. The fruit being barely scalded through, it is dipped hot into the heated bottles, through a funnel if the bottle necks are small. This is done carefully so as not to mash the fruit. The bottles are filled up to where the bottom of the stoppers come; they are then jarred a little to make the air bubbles rise, and more fruit or sprup added if needed. The tops and necks are then wiped clean inside and out, and the stoppers put in and sunk to a level with the top. The cement being warmed in the mean time, a little is dipped on over the stopper to close them tightly. The bottles are turned necks down into little patty-pans, or saucers, and a quantity of cement dropped to completely inclose the stoppers and the necks. When cold, the bottles may be set either side up, the cooling will shrink the contents so as to create a strong inward pressure, but the patty-pans prevent the stoppers from being pressed in, and the cement shuts out air.

The whole process is simple, and quickly performed. After the fruit is prepared, two persons will heat it, and put up 50 to 100 bottles in a half day. We prefer quart bottles as these furnish enough for once opening. If cork stoppers are used, they are rendered soft and pliable and may be crowded into a small orifice, by first soaking them in hot water.

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**HOW TO MAKE A BOILED DISH.**—Almost every family has a dinner as often as once a week of what is popularly known as a "boiled dish," and which, properly cooked, is one of the best dishes in the world; but all cooks do not know the best way to boil corned beef. The common method, in order to make it tender, is to put it into cold water and let the beef and water come gradually to boil. This certainly makes beef tender, but also extracts the juicy flavor. A better way is to wait till the water boils before putting in the beef; it will then be sufficiently tender and will retain all its strengthening and juicy properties. Hams, after boiling four or five hours, according to size, should be taken out, the skins taken off, and cracker and bread crumbs grated over them; and then baked in a brisk oven for one hour. A leg of mutton can be treated successfully in the same way, only it does not need to be boiled so long, and of course the boiling should be gentle.

From the Farmer's Advocate.

### Farmers' Convention.

WYANET, July 1, 1862.

MR. EDITOR: I noticed an article in your issue of June 21, from friend J. H. Pickerell, under the above head, inquiring about the proposed convention of County Agricultural Societies. I suppose such an idea has "gone up," as I have seen no effort from any source for some time, in relation to it. The officers of the State Society took the subject under consideration, and, as I understand it, concluded such a convention impractical or useless. But, in the place of it, recommended the holding of a Farmer's Convention at Peoria, during the next State Fair, and say "that, in case it is decided to hold such convention at the time and place mentioned, the Executive Committee will make the necessary arrangements to accommodate such convention during its sessions, and will heartily co-operate as individuals in furthering the objects of the same.


Whether societies will conclude to have such a convention at some time and place, as has been talked of, and societies have voted on, I am unable to judge; but think it clear that no aid can be expected from the State Society on this subject. I feel that such a convention at the time of the State Fair, will be next to useless, as there will be enough else to attend to at that time.

I wish to make an inquiry of those who know: Having sent out premium lists to quite a number of (the most I could find out name and postoffice address of) county societies in hopes that we might compare lists and learn improvements therefrom, only two societies have sent as exchange, and no Agricultural paper except the State Agricultural Society's Journal, has noticed the reception of it, though one at least has noticed that of other societies. I want to know if these officers of county societies are unwilling to that we can receive improvement from them?

Improvement has been and is my aim; and I thought by this exchange, we might learn valuable points, as I see no other way to do it without a convention, neither do I know of any agricultural paper in the State, but what is filled with matter more interesting to a majority of it than the consideration of improvements in agricultural societies.

E. S. PHELPS, JR.

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 None of the cultivated grain plants have been found growing in a state of nature. It is a remarkable fact that neither oats, barley, wheat, nor rye are ever found in any country growing wild; no migrating nation possesses them; their existence marks the tiller of the soil, and although they should be found in the midst of solitude and silence, yet man has been a settler there.

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—A man with a long head is not very apt to be headlong.

### What are Jute and Gunny Bags?

The word "jute" is derived from the Bengalee term Chuti, which means false or deceptive, on account of the fibre having the appearance of beautiful silk when it is exposed to the sun for drying. It is the fibre of a plant which is very extensively cultivated throughout Bengal, and of which there are several varieties. One of these species furnish the gunny so well known in commerce. The word "gunny" is a corruption of Goni, the native name on the Coromandel coast for the fibres of the *Corchorus Olitorius*. These fibres are made into the coarse cloth which we call gunny; also into cordage, and even paper.

Jute is indigenous to the soil of India, and has been cultivated by the natives for centuries. The manufacture of gunny-bags, or chutties, as they are called, gives employment to tens of thousands of the poorer inhabitants in Bengal. "Men, women and children," says Mr. Henley, "find occupation therein. Boatmen in their spare moments, husbandmen, palanquin-carriers and domestic servants—everybody, in fact, being Hindoos (for Mussu men spin cotton only), pass their leisure moments distaff in hand, spinning gunny twist. Its preparation, together with the weaving into lengths, forms the never-failing resource of that most humble, patient and despised of created beings, the Hindoo widow. This manufacture spares her from being a charge on her family; she can always earn her bread. Among these causes will be discerned the very low prices at which gunny manufactures are produced in Bengal, and which has attracted the demand of the whole commercial world. There is, perhaps no other article so universally diffused over the globe as the Indian gunny-bag. All the finer and long-stapled jute is reserved for the export trade, in which it bears a comparatively high price. The short staple serves for the local manufacturers; and it may be remarked that a given weight of gunny bags may be purchased at about the same price as a similar weight of raw material, leaving no apparent margin for spinning and weaving."

Dr. J. Forbes Watson states that 300,000 tons of jute are grown in India, of which upwards of 100,000 tons are exported as gunny-bags, besides 40,000 tons in the raw state. The production admits of unlimited extension.

The demand for gunny-bags is so great that a London company has established a large manufactory in Calcutta for their manufacture and about \$300,000 has been already expended. Immense numbers are used in the Bombay and Madras Presidencies, and in Penang, Singapore, Batavia, and the whole of the Indian Archipelago, for packing pepper, coffee, sugar, etc.; on the west coast of South America for nitrate of soda, borate of lime, regulus of silver, etc.; in the United States for packing cotton; in fact, it is superseding all other materials for this purpose.

Each gunny-bag weighs on an average two pounds. Gunnies, or pieces of gunny cloth, are usually thirty yards long, and weigh about six pounds. From 6,000,000 to 10,000,000 gunnies, besides some thousand ready-made bags, are exported annually from India, chiefly to North

America; 4,000 to 5,000 tons of fibre and rope made of sunn, a similar fibre, are also shipped yearly.

The whole supply of jute to this country comes to us through Calcutta. Cargoes are usually completed with it. It is used in every town in the United Kingdom, and for a great variety of purposes. It has long been extensively employed in the manufacture of coarse goods, such as cheap carpetings, bags, sacks, etc. The high price of flax of late years has also led to its extensive use in yarns hitherto purely flax or tow. It is mixed with the cotton warps of cheap broadcloths, and also with silk, and from its lustre can scarcely be detected. In Dundee, Scotland, especially, it is employed in the manufacture of many fine fabrics, and the quantity now imported into that place is estimated at 40,000 tons annually. The total imports of this fabric have increased rapidly of late years.—*Annual of Scientific Discovery*.

—The worst use to which jute is put is in making rope, as it is almost worthless for this purpose. Farmers often mistake it for manilla, which is quite another thing. For oat-sacks, Osnaburghs are better, and for corn the common cotton grain sack is the cheapest in the land. In shipping corn in gunnies, more or less will always leak out through the seams, and it is estimated that from five to ten bushels are lost in this way on a car load, in three or four handlings.

A gunny will hold two and one-fourth bushels when well filled. These cost about sixteen cents, while the cotton grain sack will at this time cost about double. On the Mississippi grain is sold in gunnies, the gunnies included. It would be better to ship in sacks and have the sacks returned.

Ed.

How GREEN TOMATOES ARE AS GOOD AS RIPE ONES.—The very best pickle ever made, says the Bangor Whig, may be made by the following recipe. The tomato "cooked" and combined in this way is altogether a different affair from the old fashioned tomato pickle, made by putting the green tomato in vinegar, *a la* cucumber, which was never fit to be eaten. The pickle described below, however, is a condiment fit for a king, and no man who ever gets a taste of it, rightly made, will ever have any green tomatoes to spare. We have used this pickle in our family for two years past, and recommend it confidently:

Take one peck green tomatoes—not peeled—a dozen and a half small sized onions, and slice both onions and tomatoes; add half pint white mustard seed, half ounce allspice, half ounce cloves, half a dozen whole peppers (ripe) or a tablespoonful of cayenne; salt enough to season. Cover the whole with vinegar, and boil two hours.

### Wisconsin Fruit Growers' Association.

This valuable report has been on our table for some weeks, but absence and other pressing duties has prevented any very special attention to it. We cut such portions from the report as will interest our readers:

#### CURRENTS.

O. S. Willey—Cherry Currants are a humbug in my opinion, though for the present very popular; they require more thorough testing; have proven shy bearers; bunches short and comparatively few berries, though large. White Grape is an acquisition, a good bearer, fruit large and sweet. Worst feature—bush is very spreading and crooked grower. All currants require high cultivation; too much manure can hardly be applied; prune very close in the fall; spade the ground six inches deep; cover the ground about four inches deep with half rotted stable manure; this answers as a mulch to the roots and cooling shade to the fruit in summer. In fall spade the ground again, and re-cover with the half rotted manure; always plant in plats, three by four feet, instead of long rows. Black English, or Naples, which appear to be identical as cultivated in the West, make excellent wine.

Atwood—For me, Black English is preferable to any other sort.

J. T. Stevens—Believe the White Grape fully equal to the White Dutch, for general cultivation. Cherry too acid and bunch too small.

E. B. Quiner—Never saw ground too rich for the currant; mulch and work the ground thoroughly.

Recommended for general cultivation: Red and White Dutch and White Grape. For further trial, Victoria, Red and White Gendemin, Red Grape, Cherry, Long Bunch Red, Knight's Sweet Red, and Versailles.

#### GRAPES.

Stevens thinks the Northern Muscadine a good grape, well worthy a place in every garden; bunches usually large; fruit well set; Diana and Delaware are superior to Isabella in flavor, and much earlier; the first being as large. Concord is better in earliness but not in flavor. Diana vines perfectly hardy and good grower; have made growth three-fourth inch in diameter this season. Elsingburgh, a very fine sweet table grape. Clinton, good hardy vine and an abundant bearer, where better ones fail.

Plumb—Would put the Elsingburgh first in the list of "hardy" vines. Vermont is hardy, and resembles the first in manner of growth. Charter Oak is very nice to look at, but not worth the ground it occupies. All grapes bear better if laid down in winter, start better in spring; think Vermont, Elsingburgh, Concord and Clinton are worthy general cultivation for arbor and trellis vines, and when people do not want the trouble of protecting in the winter. Under an improved system of culture, the Delaware, Diana and other half hardy varieties will supplant all the old second rate sorts. ]

Cooper has no fault to find with Northern Muscadine, Hartford Prolific, Isabella, Concord or Clinton, all are worthy.

Stevens—Isabella needs protection, would recommend it for half hardy vines. Catawba not to be depended upon, as the frost sometimes cuts the fruit off. Diana is sweet as soon as fruit begins to turn; grown it four years; never lost an inch of wood from the cold; ripens about three weeks earlier than Isabella. Diana and Isabella keep well after gathering; no trouble to keep them till Christmas.

The society recommends for general cultivation the Isabella, Concord, Clinton and Vermont. For further trial, Delaware, Union Village, Marion Port, Diana, Rebecca, Northern Muscadine and Elsingburgh.

#### LAWTON BLACKBERRIES.

Stevens—Plants all kill; Red and Yellow Antwerp Raspberry satisfies me; protects by covering with loam.

Willey—A humbug as far north as this, or in this climate. A few miles south, but on the lake shore, bears abundantly. Clay soils seem to suit it best, but need draining; protection with straw of no avail; grows at the east; plant upon well drained, heavy soil, in rows three by five feet apart; cultivate with horse.

#### CHERRIES.

Kellogg—Would recommend common Red English and the Morellos. Succeed best in propagating by budding.

Brayton—Belle de Choisey and Reine Hortense do well on dry upland.

Atwood has seen good success by grafting.

Willey—Cherries should be worked only in the Mahaleb stock; Mazzard too spongy and tender for our western soils. Train trees with low heads, or rather, with no bodies; form bushes, not trees. Early Richmond is as hardy as any fruit known; Plum Stone Morello resembles it in growth, and is equally as hardy. Governor Wood, with low head, also succeeds.

Plumb—Would set dwarfs; dwarfs by nature, dwarfs by pruning and dwarfs by propagation; have lost thousands of (prospective,) dollars by trying to grow Heart and Bigarreau cherry trees. The Dukes and Morellos, especially the latter, are alone to be depended upon, and there are enough of them that are first rate to warrant setting largely.

#### CANT GROW PEACHES.

Kellogg—Trying a few, and anticipate success; put them under ground in fall; that is, cover them sufficiently with dry straw and manure. Trees to be low trained.

Brayton—Curbing with boards and filling with straw, sawdust or dirt, will answer a good purpose.

Willey—Never planted a peach in the West, but have seen them tried in various ways; training low, bending to the ground and giving earth

protection is the best. Planted north side of board fences, where snow will cover and keep off winds sometimes succeeds. Straw is too loose; allows too free a circulation of winds.

#### APPLES—SEASON LIST IN FOUR DEPARTMENTS.

No. 1—Extra hardy list of good varieties in use from July to Spring found successful in the valleys and undrained soils, if well ridged with the plow.

- |                  |                       |
|------------------|-----------------------|
| 1—Red Astrachan, | 6—Canada Black,       |
| 2—Fall Stripe,   | 7—Talman Sweet,       |
| 3—Sweet Pear,    | 8—Perry Russet,       |
| 4—Fall Wine Sap, | 9—Eng. Golden Russet, |
| 5—Sweet Wine,    | 10—Red Romanite.      |

No. 2—Hardy list of excellent varieties in addition to No. 1, of early and long keepers, for elevated well-drained locations, of any aspect, and for rich soils.

- |                          |                       |
|--------------------------|-----------------------|
| 11—Sweet June,           | 20—Colvert,           |
| 12—Summer Golden Sweet,  | 21—Bailey Sweet,      |
| 13—Early Pennock         | 22—Cider,             |
| 14—Duchess of Oldenburg, | 23—W. Seeknofurther,  |
| 15—Sops of Wine,         | 24—Vandevere,         |
| 16—St. Lawrence,         | 25—Yellow Bellflower, |
| 17—Aut. Strawberry,      | 26—Pomme Grise,       |
| 18—Benoni                | 27—Winter Wine Sap,   |
| 19—Snow,                 | 28—Northern Spy,      |
|                          | 29—Willow Twig,       |
|                          | 30—Rawle's Janet.     |

No. 3—Half hardy and tender list, which are number one in quality, but require high ground, well drained, and medium soil, with cool aspect. July to spring.

- |                      |                            |
|----------------------|----------------------------|
| 31—Early Harvest,    | 42—King,                   |
| 32—Red June,         | 43—Fallwater,              |
| 33—Summer Queen,     | 44—Wagner,                 |
| 34—Keswick Codlin,   | 45—Herefordshire Pearmain, |
| 35—Maiden's Blush,   | 46—Swaar, winter,          |
| 36—Pumpkin Sweet,    | 47—Belmont,                |
| 37—Hawley,           | 48—R. I. Greening,         |
| 38—Fall Pippin,      | 49—English Russet,         |
| 39—Twenty Ounce,     | 50—Dominie.                |
| 40—Rambo,            |                            |
| 41—White Bellflower, |                            |

No. 4—Amateur list of old and new varieties, some of which will be found among the best for general cultivation.

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|------------------------|-------------------------|
| 51—Early Joe,          | 68—Hurlbut,             |
| 52—Early Strawberry,   | 69—Utters,              |
| 53—Summer Rose,        | 70—Rome Beauty,         |
| 54—Cole's Quince,      | 71—Jersey Black,        |
| 55—Early Red,          | 72—Smokehouse,          |
| 56—Porter,             | 73—Harper's Sweet,      |
| 57—Cranberry,          | 74—White Apple,         |
| 58—Williams' Favorite, | 75—Jefferson,           |
| 59—Pear Sweet,         | 76—Chester co. Redst'k. |
| 60—Primate,            | 77—Danvers W. Sweet,    |
| 61—Drap d'Or,          | 78—Lady,                |
| 62—Water,              | 79—Campfield Sweet,     |
| 63—Cooper,             | 80—Ft. Miami,           |
| 64—Rosseau,            | 81—Black Vandevere,     |
| 65—Sweet Gillflower,   | 82—Chronicle,           |
| 66—Fulton,             | 83—Dumclews.            |
| 67—Saxton,             |                         |

No. 5—List of vigorous sorts, found adapted to sandy soils.—Nos. 2, 4, 5, 6, 9, 10, 11, 22, 24, 28, 45, 50, 64.

#### PERRY RUSSET—(SYN. GOLDEN RUSSET.)

Tree moderate grower, with redish, brown wood, beautiful and spreading in the orchard, but good nursery tree, as it loses nothing by going backward, and has no waste wood if properly summer pruned by the hand.

It was formerly introduced into this State from Western New York, under the above names, but seems to have been lost sight of by Eastern fruit growers.

It finds a congenial home in the rich prairie soils of the Northwest, to which, its extreme hardness and uniformity of growth seem adapted.

Fruit above medium size; nearly round, often little flattened conical; color yellow, evenly russeted with many specks and occasional russet patches; stem short; cavity medium, thickly russeted; calyx small, closed; basin regular, narrow and deep; core small, seeds few; flesh yellowish white, compact but tender, juicy, mild sub-acid.

It is less saccharine than the English Golden Russet, much finer in appearance, nearly twice as large, more tender fleshed, and more valuable as a dessert fruit than the latter, and equally hardy. In common with all the Russets, it is liable to wilt unless kept in a cold place.

[We have fruited the above for several years, and find it all that is claimed for it. We presented specimens at the meeting in Chicago, but they were much less in size than those from Wisconsin, but pronounced identical by Hanford, Willey and others. We received them from Buffalo nursery of Col. B. Hodge, under the name of Winter Russet, which we retained. Poughkeepsie Russet, Cheesboro' Russet, and a half dozen other cognomens. But this was always a characteristic trait of the Colonel to give you a fruit under at least half a dozen different names without any assurance that either would be the true one. ED. ILLS. FARMER.]

#### CIDER.

Resembles the St. Lawrence in tree, but more vigorous, great bearer, very hardy and productive; fruit, large, oval, medium sized, red striped; stem slender, in a very narrow; deep cavity; calyx small, closed, slight basin, core medium; seeds many, small; flesh, white, tender, brisk, sub-acid; excellent cooking and eating. September to January. It promises to become one of the few completely successful in the rich soils of the West.

#### FALL STRIPE.

Vigorous, beautiful grower, extremely hardy great and early bearer; fruit, medium size nearly round, uniformly fair, tender, aromatic, sub-acid flavor, which takes everywhere; season, August and September; for family and market.

unequalled in all qualities of tree and fruit by any of its season.

[Our readers in the north part of the State will find much of value in the report. Several in the Extra Hardy List, we have not fruited, and know little of them. Of No. 2, we should leave out Nos. 17, 20, 23, 24, 26 and 28. Of No. 3, we should leave out Nos. 38, 39, 41, 48 and 49. Also Black Vandevere in the next List. ED. FARMER.]

### The Field of War.

Cal Harris, of the Ohio Field Notes, is having the war fever, and will soon mount his Rosinante and draw his sword for his country. The Col. has seen service—for what agricultural editor has not. We have kept down the fever by taking an occasional turn among the tented soldiery; but a couple of weeks camping out and living on camp fare, takes off the ardor of our spirits, and we very contentedly return to the pen, which is befitted to our hand than the sword.

We wish the Colonel success in raising his "Reaper Regiment," and may they reap largely of the enemy on the field of battle. Below we cut from the Colonel's Field Notes:

During the last days of June and the first days of July, there was terrible fighting in front of Richmond. The rebel army had been largely reinforced by Gen. Jackson from the Shenandoah Valley, and from the army in the southwest, also by conscripts from the people, so that it far outnumbered the army under General McClellan. Being thus in force for offensive movements, the rebels fell upon our army, where they were met with stern and fatal resistance, but forced McClellan to fall back by degrees, a distance of seven or eight miles in all, to a position on the James river, supported by his gunboats, where he made a successful stand, and after resting two days, again advanced towards Richmond, a distance of nearly ten miles. The result of this series of battles, was a loss of fifty thousand men on both sides, two-thirds of which was from the ranks of the enemy, who fought with desperation, and were literally mowed down in thousands by our artillery. Gen. McClellan has been strengthened by fresh troops and plenty of gunboats, and will soon be in condition to assault Richmond. Gen. Pope, from the Western army, has been placed in command of the armies in the Shenandoah Valley, and will probably concentrate the several divisions into a powerful force, with which he will move on to Richmond from that direction. Burnside is also moving up to the same point from North Carolina, so that Richmond will be a hot place shortly. There will be business in that quarter now.

The Government has called for 300,000 more men, for three years or the war, whereupon Gov. Tod issues his proclamation, saying that an ef-

fort is being made to raise twenty-two infantry regiments in Ohio. For this purpose, the State is divided into districts, and camps of rendezvous and instruction will be opened in Cleveland, Toledo, Mansfield, Lima, Dayton, Portsmouth, Marietta, Steubenville, and Zanesville, in addition to the present extensive camps at Columbus and near Cincinnati.

In this State of affairs, we—that is; the editor of Field Notes, have stood it about as long as we can. Our fingers have been itching for several months to clasp the sword hilt and the carbine; our good Quaker resolution has faded out, the wing of the war eagle has touched us, our blood is up, and the readers of Field Notes need not be surprised to learn, in a few weeks, that we are upon the war path, swooping down to the harvest of death.

Who of our readers will rally to our banner, when the wheat and the hay are gathered; and make up the "Reaper Regiment" for the war? We are in sober earnest, and shall expect a prompt and hearty response.

### Comstock's Rotary Digger.

Messrs. Comstock and Glidden, of Milwaukee, Wis., have been on a tour through these States, from Wisconsin to Washington by way of Cincinnati, Columbus, etc.; for the purpose of exhibiting and testing a new rotary digging machine, the invention of C. Comstock formerly a citizen of this county.

The machine consists of a cylindrical iron frame about three feet long, on the face of which are courses of flat steel tines, an inch in width, working in eccentric cam slots, in such way that as the machine progresses the prongs enter the ground with a natural projection, like the spade in the hands of a man, and leaving the ground lift the soil in the same way, giving it a sudden shake, by which the clods are broken and the soil left in a fine condition. The constant lifting and shaking of the earth behind the machine, keeps up a lively flutter, much like that of water after a stern wheel steamer. The cylinder is about three feet in length, with seven in each course and twelve courses, each course fastened to an iron bar running the length of the cylinder.

Upon trial at Cincinnati, and again at Columbus, the digger did not work to the satisfaction of the exhibitors or the spectators, owing, as Mr. Comstock thinks, to the compactness of the soil where it was tried. It is a heavy pull for a team of two extra stout horses with the driver in his seat upon the machine. On light soils, clear of roots and stones, it will not not work over half that depth, the first time going over.

We think Mr. Comstock has got the true principle of projection and elevation in his machine; the difficulties yet to be overcome are to adapt the digger to more general purposes as to kind of soils and the necessities of farmers, who must have a machine that is simple, effective, durable, and at a reasonable price. While the farmer can get a plow and harrow for twenty



dollars, that will do tolerably well on all lands, he will not pay two hundred dollars for a digger which will work ever so well on only a particular kind of land.—*Field Notes.*

— We have not had the pleasure of seeing this new digger, not having sufficient faith in it to spend a day for the purpose, when in Chicago some weeks since; the editor of the *Prairie Farmer* was favorably impressed with its value. We shall avail ourself of the next opportunity to give a thorough examination. The name of Comstock—Prof. Comstock—has had a bad sound to us, but we are assured that this Mr. Comstock of Wisconsin is in no way akin to the *ci divant* Professor of terra-culture, whose persistent efforts at humbug is worthy of a better cause.  
Ed.

**HOW HORSES SHOULD BE SHOD.**—A recent issue of the *American Stock Journal* contains a most valuable article on this subject. Young horses, the writer says, if shod at all before four or five years old, should have their shoes taken off and reset as often as once in three or four weeks. The hoof should be kept pared at the heel so that the frog may come to the ground. This keeps the frog moist and healthy, and has a tendency to spread the heel and keep the foot in its natural shape. The soft and healthy frog acts as a cushion, and saves the foot from damage while the animal travels upon hard roads. It also keeps the foot in a healthy state, and is therefore of great importance to the value of the horse. If the heel is suffered to grow down, the frog becomes dry and bony, and when it comes in contact with a stone or other hard substance the horse cripples, and subsequently becomes lame. When the hoof grows down long at the heel, it becomes dry and contracted, and the horse stands upon his toes in an unnatural and straining position. The frog, however ragged, should not be touched by the shoer's knife. To avoid raising the heel so that the foot must come to the ground in an unnatural position, the shoe should be of the same thickness at the toe as at the heel.

When the foot is properly pared, the shoe should be made to fit it so perfectly that the outside crust of the hoof will not have to be cut down to fit the shoe. The shoe should not be opened at the heel wider than the hoof, as this has a tendency to crowd in and contract the foot at this point; but if the outside of the shoe is brought in even with the outside of the hoof, it has the opposite effect. The hoof should never be rasped or filed above the clinches, nor the nat-

ural enamel, which is given to it for some wise purpose, disturbed. Fancy shoers—from all of whom good Lord deliver us—are too much in the practice of rasping, filing, and sand-papering the hoof to make it look nice, without ever thinking that they are doing it an injury that is beyond their power to repair.

For the Illinois Farmer.

### Gathering Seed Corn.

Seed corn should be gathered in the month of October. Corn, then, is in its full maturity, and if farmers want to save a good amount of labor and expense, that is the time to gather their seed corn. Strip from it the husks, and put it away in some dry place. Corn for planting is much better dried in the shade. I have had personal experience in this matter, and am satisfied that seed corn, and that which is sure, can be procured with but little trouble and expense. I trust the farmers will look into this matter with more interest in the future than they have done.

N. S. K.

—In all the north part of the State too great care cannot be taken to secure good seed corn, and often for the want of it, the crop is lost. In the South half of the State almost any part of the crop will be sure to grow, and it is customary to take the seed from the crib. We never have any trouble with our seed here, when put in a crib, covered from rain and snow. No farmer can afford to do without corn cribs well covered, these tumble down annually and cost more in the course of a few years than a good respectable one that will keep the in crop good seed corn condition.

### The Crop Prospect.

PORT BYRON, July 25, 1862.

M. L. DUNLAP, ESQ., *Dear Sir:* The season has been very discouraging for farmers.

The wheat crop is very poor, much that is not worth harvesting—in fact, will not be harvested. Harvesting commenced last Monday. The grass crop is magnificent, but much of it spoiled for hay by heavy rains while in the swarth, and by being “washed down” by the flood on low lands, covered with mud, etc. Oats, corn and potatoes promise well.

#### FRUIT.

Apples—about half the crop of last year. Small fruits have been in their glory—strawberries, gooseberries and currant have exceeded in

fruitfulness any year ever known in this locality. We have grown thirty bushel of the Houghton's Seedling gooseberry on three rows of bushes about twelve or thirteen rods long—all fair fruit without even a speck of mildew.

#### THE BLIGHT

On the apple is more universal this year in this and Whiteside counties than ever before known. Many of the native crabs are severely attacked with it—have seen some so bad that I think their recovery from its effects doubtful. The fact of the native crab being attacked with the blight goes far to establish the theory that the blight is caused by an insect and not by freezing or any other climatic influence.

The blight was never seen, as I am aware, until orchards were planted and were first attacked with the disease.

We have the Willow Twig in a good state of preservation, kept in the *Cave*.

We think the ILLINOIS FARMER a live agricultural journal,—it may ride some hobbies rather hard, but there is no other way but by putting on steam and cutting a channel through the sandbars thrown across its track by ignorance and prejudice. So "pitch in."

Yours truly,

A. S. COE.

For the Illinois Farmer.

#### Prepare for Sugar Making in Time.

How shall we get our sugarcane manufactured? There is now planted in the northern part of this State and Iowa, hundreds of acres of sugar cane, and it looks first rate. There will be more sirup than can possibly be used for home consumption if it can be manufactured. I hope that every one that has an acre of this will secure a place to get it manufactured in due season, for all those that have machines will have all that they can do. Farmers, don't let your cane go to waste.

Harvest, in this vicinity, is going on rapidly. The wheat is not what you might call a full crop. The heavy rains that fell during the first of July and the chinch bug has damaged the wheat considerably in this section as well as in the portion of Iowa which lies opposite here.

Rye is generally pretty good.

Oats look promising. Some fields look backward on account of poor seed.

Potatoes look promising for a heavy crop. There has been a large quantity planted in this part of the State.

N. S. KETCHUM.

Cordova, July 26, 1862.

PAINT FOR MARKING LABELS.—1. In the business of the garden and orchard marked stakes and labels are often needed for temporary purposes, as the designation of rows of fruit trees, new varieties of corn and potatoes, flowers, etc., or rows of seed sown in hot beds.

2. The staves of an old barrel sawed in two and sharpened at one end answer for larger purposes, and short pieces of hemlock lath, planed smooth on one side, for smaller ones. Those who happen to have blocks of cedar cut off from long posts, or even the sound portion of cedar posts that have failed, will find them especially useful wood for splitting up for either large or small marks and stakes.

3. For paint to mark such stakes and labels I have found nothing so cheap and ready as shellac varnish, into which a little lampblack had been well worked. Whether used in making letters or figures it should be applied with a small brush. It is better applied to the naked wood than to a painted surface, to which, especially if the paint be fresh and glossy, it does not adhere well.

Such paint will continue legible until the stakes decay.

Its superiority to oil paints is seen in two facts—it dries rapidly, and it does not spread on the wood when first applied, as does oil paint on a great many surfaces, and become illegible.

So also this same mixture is superior for the same reason for marking barrels, boxes and bales of goods.—*Country Gent.*

GESE VS. COWS—A COMPARISON.—The Rural has been favored by correspondents, with several inquiries relative to the care of geese, and as we note some talk about this fowl, (though embracing another branch of their keeping,) we give the following from a writer in the Irish Farmer's Gazette:

Seeing in your "Gazette" of last week a query as to the number of geese equal to a cow on grass, an answer at once suggests itself. In some parts of the locality round me a plantation acre of grass will fatten a bullock at four or five months' feeding. Now, an average sized goose, weighing ten pounds, will eat at least two pounds of grass per day—that is, one fifth of her weight, and certainly will destroy as much more, and leave it unfit for a beast to touch. But leaving the last statement out of the question, and taking for granted that a cow will eat seven stones, or ninety-eight pounds, of grass per day, we have forty-nine geese equal to one cow. But now let us take a view of the two acres at the end of the season, and what will we see? The acre fed by the cow, although bare, is well manured; and "nothing worse of the wear; while the one fed on by tee geese is literally burned up by their dung. Any person that knows the dreadful injury inflicted on grazing pasture by geese, would manage to house-feed them, unless there were a commons or bog convenient to drive them out on.

The editor remarks: Though the droppings of the geese injure the grass for the time being, it acts as a potent manure afterwards.

**CORN AFTER BUCKWHEAT.**—A correspondent of the Country Gentleman asks "brother farmers to give their experience on raising corn after buckwheat." I well recollect, when a lad, that my father plowed and planted a field to corn, on a small portion of which was raised buckwheat the year previous. The soil of that part on which the buckwheat grew was precisely like that of the other part, and the crop on this latter, which preceded the corn, I think was rye. It was all plowed and otherwise treated alike; no manure on any of it. Now for the result, on the buckwheat land corn enough was not obtained to plant the same ground again, while on the other part a fair crop was raised.

Again, I know a farmer who insists that corn can be raised after buckwheat, and that the buckwheat makes no difference with the corn crop. He has tried it under my own observation, and has succeeded in raising some corn, a fair crop, but then he takes land already in a high state of cultivation, and by manuring highly, and perhaps applying other fertilizers, he does raise some corn after buckwheat, but in all probability not near the amount he otherwise would by applying the same manure, etc., on land not immediately preceded by a crop of buckwheat.

One correspondent says that "he would like to know the reason why corn cannot be raised after buckwheat." I cannot give the reason, but will say that facts are stubborn things to contend with, and I think we can more profitably spend our time, labor, etc., than by trying to raise corn directly after buckwheat.

— We have seen the attempt made to grow corn after buckwheat, but it has in all cases proved a failure, and we think it may be considered a settled principle that no amount of good culture can materially change the result. Oats succeed quite well, and we now follow buckwheat with oats. We have sown spring wheat after buckwheat, also, with good success. Potatoes do badly. We therefore recommend only oats to follow buckwheat, as the buckwheat that will remain in the crop will not injure them for feed.

ED.

### Trouble in the Pear Trees.

A quantity of limbs from pear trees is exhibited this week by J. Breck, Esq., of Brighton, President of the Massachusetts Horticultural Society, on which the leaves have suddenly turned black.

These limbs are from fruit bearing trees, and the young pears on them will never approach any nearer to the eatable condition. The complaint is not common to all kinds of pears, as yet seen. But many trees in his grounds are much injured by this sudden change in the apparent condition. On cutting into the limbs and splitting them from end to end, no traces of worms could be seen. At least it seems to be required to call the disease a "sap blight." It probably results from

sudden mutations of the weather at a previous period — *Mass. Ploughman*.

—The above is a species of blight that the West is but too well acquainted with. Last year, in Adams county, we saw pear trees six inches in diameter, loaded with fruit, killed outright with this kind of blight; nor is it confined to the pear alone, for apple trees are killed with it. A tree struck with this blight, is affected in whole or in part; sometimes the whole top of a pear tree will have its leaves blackened and killed; and again the trunk may have a band of the bark thus killed and the top remain green, though the supply of sap is cut off. In this case the fruit will sometimes mature. The leaves of apple trees turn brown instead of black. When the supply of sap is cut off, the leaves soon turn yellow and fall off, the fruit seldom maturing. We have a Keswick Codlin, four years set in orchard, with a band of the bark thus blighted, from which we took half a bushel of the half grown fruit, the tree will of course die. We can see no difference in its attacks on thrifty or unthrifty, seedling or grafted trees. Of all forms of the blight this is the one that we most dread.

ED.

**A YOUNG MAN'S FIRST LESSON.**—Timothy Fitcomb is guilty of uttering very many blunt truths, and here is one from his letters to the young:

"I take it that the first great lesson a young man has to learn is that he is an ass. The earlier this lesson is learned, the better it will be for his peace of mind and his successes in life. Some never learn it, and descend into the evening of their existence, their ears lengthening with their shadows as they go. Some learn it early, get their ears cropped, and say nothing about it; while others sensibly retire into modest employments, where they will not be noticed. A young man reared at home, and growing up in the light of paternal admiration and fraternal pride, cannot readily understand how any one can be as smart as he is. He goes to town, puts on airs, gets snubbed, and wonders what it all means; he goes into society and finds himself tongue-tied; undertakes to speak in a debating club, and breaks down or gets laughed at; pays attention to a very nice young woman, and finds a very large mitten on his hands, and, in a state of mind bordering on distraction, sits down to reason about it. This is the critical period of his history. The result of his reasoning decides his fate. If he thoroughly comprehends the fact that he does not know anything, and accepts the conviction that all the world around him knows more than he does, that he is but a cipher, and whatever he gets must be won by hard work, there is hope for him."

**RAISING TURKEYS.**—Why is it that at least three out of four farmers do not succeed in raising turkeys? With all other poultry they are successful, but turkeys are abandoned by most farmers as too uncertain and troublesome to bother with. Now this is all wrong—for once a person gets the knack of raising these fine fowls, they can raise just as many as they please. So far as I am concerned, I generally raise more turkeys than I know what to do with, and I have turkeys now left over from last year, that will be eaten as we want them. Last winter we fairly revelled in roast turkey—give quite a number away—sold others, have some, beside the breeder, still left. My plan of raising is simple, and I will give it in as few words as possible.

First, I never allow a turkey to set until about the middle of May. They will commence to lay early in April, but I take their eggs away as fast as laid, and keep them until they lay their second batch, which will be finished about the second or third week in May. I then give her some eighteen or twenty of the eggs and let her set. Along about the middle of June she will be off. I then take her, put her with her young on an old barn floor, or other out-building that is dry, and feed on curd and cracked corn. Curd is the best for a continual feed when the farmer has plenty, but cracked corn or coarse meal, mixed with lobbered milk, will answer about equally as well. After they have been in doors for two or three days, or long enough to get fairly on their legs—for the turkey is the weakest of all fowl when young—I let them out, providing the weather is fine, and there is no dew on the grass. The great reason why people cannot or do not raise turkeys is, because they turn them out as soon as hatched, and about the first wetting they get they keel over and die. To succeed in raising turkeys, therefore, you must keep them dry until at least ten weeks old, when they will stand as much water as other fowls—geese and ducks excepted. Of course, they must be driven in every night, and on all occasions when a storm is threatening. The reader will at once perceive there is care in all this, but when Thanksgiving and Christmas come—to say nothing of all the Sunday roasts during the winter, our care is lost in enjoyment, and we come to the conclusion that “turkeys are worth raising.”—*Dollar Newspaper*.

—The above will be valuable to those who are fond of Christmas turkey; for ourself we like the chicken better; they are more cheaply and certainly raised, and for Sunday dinner equally valuable. The rambling disposition of the turkey and his propensity for spring onions and early cabbage, is against him; but those who prefer them to the chicken will find the above valuable advice. ED.

### The Cultivation of Grasses.

It is a common complaint among intelligent farmers; and the fact is verified by statistical returns, that the average yield of meadows is also that of arable lands is less at the present day than it was twelve or fifteen years ago, and some of the more scientific agriculturists have attributed this deterioration to the prevailing ignorance

in a great measure among farmers in regard to the nature, use and relative value in the way of nutriment of the various species of grass. The best grasses even when natural to the soil under culture, run out earlier than the coarser and less valuable sorts, and this fact should be constantly borne in mind. Of all the grasses timothy is the most nutritive, but upon uplands, for home consumption, the orchard grass will be found most profitable. Lime, potash and the phosphates must be present in the soil in which grasses are grown, and in sufficient quantities to keep the yield year after year up to the highest acreable product; but liquid manure, which contains the fertilizing elements in a soluble state is also of surpassing advantage when properly applied. The true plan in seeding down to grass is to stock the land, not with one sort of seed alone, but with a variety, taking care however as far as possible to sow only the seeds of such grasses as come into flower about the same time. It has been demonstrated that only a certain number of seeds will grow on a given area; that not more than two seeds of blue grass for instance, will upon a square inch of ground, whereas by seeding the same space to timothy and multiplying the kinds some five or six different varieties will fill up and mature upon the same space of ground. Of course, all other things being equal, the greater number of plants that can be made to grow and flourish upon a given space the heavier will be the product of hay to the acre.

In preparing the land for grass it is essential that it should be deeply plowed; subsoiling being of infinite service in increasing the supply of soluble food, and also in guarding the grasses against the deleterious effects of our summer heats and drouths by keeping the soil cool and yielding by evaporation a supply of moisture at a time when it is most needed. A second condition is, that the soil should be reduced before seeding to as fine a tilth as possible. After sowing the seed, care must be taken that it shall not be covered to a greater depth than about one-eighth of an inch—for if it is covered to a depth of half an inch, very many of the seeds will be lost, and if to one inch they will not germinate at all. The use of the harrow in covering grass seed is very objectionable, but if it must be harrowed in, it should be done very lightly. The best time for sowing grass seed is just before a rain, for if the soil is sufficiently loose, the rain in its action upon the finer particles of soil, will furnish the seed with the necessary covering.—In applying lime to grass lands, if the lime is slacked with brine made from refuse salt, its agricultural value will be greatly increased. In seeding down to timothy not less than a peck of seed should be used, and the fields if made rich, should be suffered to remain in grass for a number of years; taking care to keep the grass in vigor by scarifying the soil in the autumn and by occasional top-dressing of manipulated guano and wood ashes—a hundred and fifty pounds to the acre of the former and from fifteen to twenty bushels of the latter. By pursuing this system and by not pasturing the meadows in the fall of the year, heavy crops of hay may be taken from the lands for many successive seasons.—*Rural Register*.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, AUGUST, 1862.

### Editor's Table.

THE cereals have been gathered, the hay is in loft or stack, all but the late upland prairie grass, the millet and Hungarian and second growth of clover are yet to be harvested. Wheat sowing approaches and the farmer's work yet looms up in a portentous wall before him; he has no time to lose; his task will not be done before the bleak days of December shall drive him indoors.

In spring time and early summer he worked on hope; now he can see the result of his labors, whether they have been well or ill directed. whether the season has been favorable or otherwise, he is reaping a proportionate reward.

We need not attempt to do two days work in one, but use brains and lay out our labor to the best possible advantage, secure the several crops as they mature and let none go to waste. The days now begin to shorten, though the heat is not less ardent, but the summer nights are more cool and we feel as though rapidly marching on to autumn. Apples are now abundant in most places for cooking, but few eating—this comes of the error in planting a large majority of the orchards to winter fruit, an error that should be corrected in the planting of every new orchard.

Stubble land should now be plowed to keep the autumn weeds from filling the land with their foul seeds. If it be plowed again in spring, plow shallow, if not, plow deep. Fall plowing has become the order of the day in the north part of the State, and is receiving attention in the center, while of the south we are not prepared to say much at present, for its mortar-like

soil has such a peculiar way of finding its own level, that we are somewhat doubtful of the value of plowing it until spring, but if weedy should risk the experiment.

**THE MAY CHERRY AGAIN.**—In the Fruit Catalogue of Messrs. Elwanger & Barry, for 1860, we find the following under the head of "Duke and Morello Cherries:"

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varying from light red, like Belle de Choisy, to dark brown, like May Duke or Morello.

The Dukes have stout, erect branches usually, and some of them, like Belle de Choisy and Rsine Hortense, quite sweet, while the Morellos have slender, spreading branches and acid fruit invariably. These two classes are peculiarly appropriate for Dwarfs and Pyramids, on the Mahaleb stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreus are too tender.

*Belle de Choisy*—Medium size, amber shaded and mottled with red, tender, melting, sweet and rich; rather a shy bearer. Tree makes a pretty pyramid. End of June.

*Belle Magnifique*.—A magnificent, large red, late cherry, excellent for cooking and fine for table when fully ripe; rather acid, tender, juicy and rich. Tree is a slow grower, but a most profuse bearer; makes a fine dwarf or pyramid on the Mahaleb. Last of July. Very valuable.

*Buttner's Oct. Morello*—Medium size, red, acid; hangs on through September; valued only for its lateness. Tree a vigorous, erect grower, and makes a beautiful pyramid. Moderate bearer. *De Nord Nouvelle* and *De Prusse* are very similar to, if not identical with, this.

*Carnation*—Large, light red, mottled with orange; tender, juicy, a little acid, rich and excellent; tree is a good grower and profuse bearer; makes fine dwarf. Middle and last of July. Very valuable.

*Donna Maria*.—Medium size, dark red tender, juicy, rich, acid; fine for cooking. Tree small, very prolific. Middle of July.

*Early Richmond or Montmorency*.—An early red, acid cherry, very valuable for cooking early in the season. Ripens through June.

*Guigne Noire Luisante*.—Large, dark brown nearly black, beautiful, acid, rich. Tree small, erect; moderate bearer. Late; last of July.

*Jeffries Duke*.—Medium size, red, tender, sub-acid; branches erect and stiff; makes a beautiful pyramid. Middle of June.

*Late Duke*—Large, light red, late and excellent. Tree makes a nice dwarf or pyramid. End of July. Valuable.

*May Duke*.—An old, well known, excellent variety; large, dark red, juicy, sub-acid, rich. Tree hardy, vigorous and fruitful; ripens a long time in succession; fine for dwarfs and pyramids. Middle of June for several weeks.

*Morello, English*.—Large, dark red, nearly



black; tender, juicy, sub-acid, rich. Tree small and slender; makes a fine bush on the Mahaleb. If trained on a North wall, it may be in use all the month of August. Valuable.

*Plumstone Morello*.—Large, dark red, rich and fine; the best of all the Morellos. Tree a slender, slow grower; makes a nice bush on the Mahaleb. July and August. Valuable.

*Reine Hortense*, (Monstrueuse de Bavay).—A new French cherry of great excellence; large, bright red, tender, juicy, nearly sweet, and delicious. Tree vigorous and bears well; makes a beautiful pyramid. "Lemercier" of our former Catalogues, proves identical with this.

*Rumsey's Late Morello*.—A variety of the the Plumstone, ripening gradually from August through September. Originated at Fishkill, N. Y.

It will thus be seen that these gentlemen who have sent out the Early Richmond do not claim that their Early Richmond is the Kentish of Downing, but the Montmorancy, while Downing puts down as a synonym of *Flemish* a member of the same family of acid cherries. It would be doing these gentlemen injustice to charge them with sending out their early Richmond as our May cherry, as we do not think they have done any such thing. If their customers have made the mistake it is their own fault, or the tree peddlers who have imposed upon them. We shall yet arrive at the bottom of this whole matter and be able to sort out the spurious from the genuine. We can only repeat our advice to those who wish to obtain the genuine May cherry (Kentish of Downing), to order them from parties who have fruited them and know that they are above suspicion.

We have several May cherry trees in the orchard grafted on Mazzard stocks, but they make but feeble growth and produce very moderate crops. The Mahaleb is little better. The Morello is doubtless the most valuable stock for this most valuable of all the cherries for the west.

#### COUNTY FAIRS FOR 1862.—

*Bureau County*.—E. S. Phelps, Jr., Secretary, Wyandot. Fair at Princeton, September 14th to 17th, inclusive.

*Carroll Co*.—James Shaw, Secretary, Mt. Carroll. Fair at Mt. Carroll, September 17th, 18th and 19th.

*Cass Co*.—Henry S. Savage, Secretary, Virginia. Fair at Virginia, September 1st to 3d, inclusive.

*Christian Co*.— — — —, Secretary. Fair at Taylorville, October 7th to 10th, inclusive.

*Coles Co*.— — — —, Secretary. Fair at Marshall, September 10th to 13th, inclusive.

*DeKalb Co*.—O. S. Vaughn, Secretary, DeKalb. Fair at DeKalb, September 24th to 26th, inclusive.

*DeKalb Co*.—W. H. Beavers, Secretary, Sycamore. Fair at Sycamore, September 10th, 11th and 12th.

*Knox Co*.—Thomas Muir, Secretary, Knoxville. Fair at Knoxville, September 23d, 24th, 25th and 26th.

*Lee Co*.—J. T. Little Secretary. Fair at Dixon, October 7th, 8th and 9th.

*Logan and adjoining Counties*.—Atlanta Union Agricultural Society, S. D. Fisher, Secretary, Atlanta. Fair at Atlanta, September 23d to 26th, inclusive.

*Macoupin County*.—Jon Tunnell, Secretary, Carlinville. Fair at Carlinville, September 23d to 26th, inclusive.

*Macon Co*.—J. K. Warren, Secretary, Decatur. Fair at Decatur, September 22d, 23d, 24th, 25th and 26th.

*Madison Co*.—John A. Prickett, Corresponding Secretary, Edwardsville. Fair at Edwardsville, October 7th, 8th, 9th and 10th.

*Morgan Co*.—J. H. Bancroft, Secretary, Jacksonville. Fair at Jacksonville, September 9th to 13th, inclusive.

*Pike Co*.—J. M. Bush, Secretary. Fair at Pittsfield, September 17th to 20th, inclusive.

*Randolph Co*.—William Addison, Secretary, Sparta. Fair at Sparta, September 24th, 25th and 26th.

*Sangamon County*.—John P. Reynolds, Secretary, Springfield. Fair at Springfield, September 22d to 26th, inclusive.

*Shelby Co*.—A. T. Hall, Secretary. Fair at Shelbyville, October 1st to 4th, inclusive.

*St. Clair Co*.—S. B. Chandler, Secretary. Fair at Belleville, October 7th to 10th, inclusive.

*Tazewell Co*.—Seth Talbot, Jr., Secretary, Tremont. Fair at Tremont, September 24th, 25th and 26th.

*Winnebago Co*.—H. P. Kimball, Secretary, Rockford. Fair at Rockford, September 16th to 19th, inclusive.

CLOTHES WRINGER.—We again call the attention of our lady friends to the great labor saving value of this candidate for their favor. Since the invention of the sewing machine, there has been no new thing sent into the economy of the household, of such inestimable value as this.—Not less than one-third of the most laborious part of the washing is dispensed with by its use; as a starcher it is equally valuable; add to these

advantages that it saves the straining of the fabrics as in the usual way by twisting, and we have a machine that no housekeeper can afford to dispense with. Mr. Peck, as will be seen in the advertising department, lays some particular claims in his machine over others, of which the ladies will be the best judges. We know they have a strong aversion to iron rust, and if it is true that the galvanized iron machines are guilty, as he avers, why it would be prudent to get a wooden one. Our better half has thus guarded against such an accident.

**MACOUPIN COUNTY FAIR**—This Fair is to be held at Carlinville on the 23d, 24th, 25th and 26th days of September or the week before the State Fair. Among other announcements they have the following: "There will be a Public Address on the fourth day of the Fair, by Hon. M. L. Dunlap."

It is to be hoped that no untoward obstacles will come in the way of its consummation. We have long since intended to take a look through the "State of Macoupin," and trust that we may be gratified. We shall of course lay our pomological friend Huggins under contribution on the occasion, as well as several other friends that we have in view.

**SHALL THE ROBINS LIVE.**—Mr. Hovey, editor of the Magazine of Horticulture, makes serious charges against the robins. He can ripen no cherries, unless they are protected by nets, on account of this cherry eater. Though the robin may be valuable on the farm, yet he is a great scamp in the fruit garden, and Mr. H. recommends his destruction. It is possible that about Boston, for the want of abundant other food, they take large toll of the cherry, yet we have not seen any act of the robin that would warrant us in driving him out of our grounds.

**CLAIM AGENCY.**—In the advertising department will be found the card of Geo. S. Thompson, as above.

We have employed Mr. T. in prosecuting claims for others, and have found him faithful and competent, and we take no small pleasure in recommending him as worthy of confidence. The soldier has enough hardships to undergo with incompetent officers without being swindled in the way of clothing, rations and transportation.—Persons having unsettled claims will do well to address Mr. T., who will at once give them such advice as will be to their interest.

**AMERICAN STOCK JOURNAL.**—This work has been missing for some months, but the July number has reached us. It is difficult to have our cotemporaries see the propriety of making exchanges to ILLINOIS FARMER, Champaign, instead of Springfield. We are only at the office of publication semi-occasionally, and exchanges that go there find their way to the waste bag of the *Illinois State Journal*—we, therefore, remind our friends why we often miss a good thing.

**MEDICAL EXAMINER.** The June number of this valuable periodical has been some weeks at hand. We miss the genial smile of our old friend F. W. Riley in its editorial pages, he having gone back to his regiment. The work is now under the sole care of Dr. Davis. The number before us is one of the most valuable and interesting of the series. No physician should be without the work, let him be regular, irregular or occasional.

**REPORT OF THE WISCONSIN FRUIT GROWERS' ASSOCIATION.**—Through the kindness of C. S. Willey, of Madison, Wis., we are in receipt of the above interesting work, extracts from which will be found elsewhere. Mr. Willey, the Secretary, who prepared the report, is one of the most intelligent and energetic fruit cultivators. We learn, indirectly, that there is some prospect of his lecturing in this State, where the climate is a little more genial for fruit.

#### STATE FAIRS FOR 1862.—

*Illinois.*—At Peoria, 29th and 30th September, and 1st to 4th October, inclusive.

*Iowa.*—At Dubuque, 30th September, and 1st, 2d, 3d, 4th and 5th October.

*New York.*—At Rochester September 30th to October 3d, inclusive.

*Ohio.*—At Cleveland, September 16th to 19th inclusive.

**IOWA STATE FAIR.**—The premium list of the Society is now before us, is well arranged and liberal to all departments of agriculture. The amount of premiums foot up some \$4,500—a pretty round sum for the young State of Iowa. The Fair is to be held at Dubuque, September 30, October 1, 2 and 3. Unfortunately the same days as our State Fair.

**HORTICULTURIST.**—The July number, as usual, is rich in practical horticultural lore. It is deserving a larger circulation west. \$2 a year, Mead & Woodruff, No. 37 Park Row, N. Y.

### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin *now*, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

 Correspondents will please be particular to give the name of the post office, county and State.

 Specimen numbers will be sent gratis, upon application

 Address

BAILHACHE & BAKER,  
Springfield, Illinois.

**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign. tf

—An Irishman had been sick a long time, and while in that state would occasionally cease breathing, and life be apparently extinct for some time when he would come to. On one of these occasions when he had just awakened from his sleep, Patrick asked him—

“And how'll we know, Jemmy, when ye're dead? ye're afther waking up ivery time.”

“Bring me a glass o' grog, an' say to me 'here's till ye, Jemmy,' an' if I don't rise, an' dhriuk, then, bury me.”

—“I say Mr. Highflyer, won't you let a fellow go with you in that 'ere balloon?”

“I could not possibly accommodate you, my dear friend.”

“Well, then be kind enough to take my card along, for I am determined to get my name up somehow ”

—A clumsy foot may tread the right path.

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CLOTHES WRINGERS.

HALEY, MORSE & BOYDEN'S  
SELF ADJUSTING CLOTHES WRINGER,

Is superior to any other in the market. Being made of wood and India rubber, the clothes cannot be damaged by iron rust, as is liable to be done with those having iron frames. The pressure can also be regulated to conform to heavy and light goods, and there is no liability of rusting out of steel springs. On the whole it is by far the best and most economical wringer yet offered in the market. It will save at least one-third the usual labor in washing.

Every one is aware that the twisting and wringing of clothes by hand, stretches and breaks the fibres; but this machine presses them so even, between two rubber rollers, that a newspaper thoroughly soaked can be wrung without breaking it in the least. Buttons, hooks and eyes, &c., are not injured by it.

In starching it is invaluable, especially on large articles, such as ladies' skirts, &c., as it leaves the starch perfectly even. It will wring a bed quilt or a pocket-handkerchief drier than it can be done by hand, and the most ignorant servant can use it. It can be screwed on to any tub, and only weighs ten pounds. Every housekeeper should send for one and try it. If it does not give entire satisfaction, it may be returned and the money will be refunded.

For sale, wholesale and retail, by

E. PECK,  
Agent for the State of Illinois,  
73 Lake street, Chicago, Ill.

P. O. Box 3047.

Agents wanted in every town.

jlm

GEORGE S. THOMPSON,

Late of Com; Gen.'s Office,

Attorney for U. S. Military Claims,

West Side of Public Square,

Springfield, Ill.

Entrance office one door north of Banking House  
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Having had much experience in prosecuting claims against the United States, particular attention is given to Recruiting Bills made by officers and men of volunteer companies and regiments, for subsisting, and, collecting, organizing and transporting troops prior to muster into service; Back Pay due Resigned Officers; Back Pay due Discharged Soldiers; Pay due Deceased Officers, their Widows or Heirs; Bounty and Pay due Heirs of Deceased Soldiers; Pensions due Deceased Soldiers' Widows and Minor Heirs; Pensions due Invalid Soldiers; Pay for Horses lost, killed or died in the United States' service; All Claims growing out of the Present War.

Pensions collected semi-annually, from the Agent of the United States at Springfield.

Any kind of claims for service, or for property destroyed, stores or property sold officers of the United States.

Would respectfully refer to Messrs. John Williams & Co., Bankers; J. C. Bunn, Esq., Banker; Capt. C. B. Watson, U. S. Mustering Officer; Lieut. Geo. W. Hill, U. S. Mustering Officer; Major C. S. Hempstead, U. S. Paymaster; Capt. Ninan W. Edwards, U. S. Commissary; Captain W. H. Bailhache, U. S. Quartermaster; Col. P. Morrison, 8th U. S. Infantry, Superintendent Recruiting for Regiments of Illinois, Springfield, Ill. Major J. G. Fonda, 12th Ill. Cavalry, Commandant at Camp Butler.

August, 1862.tf

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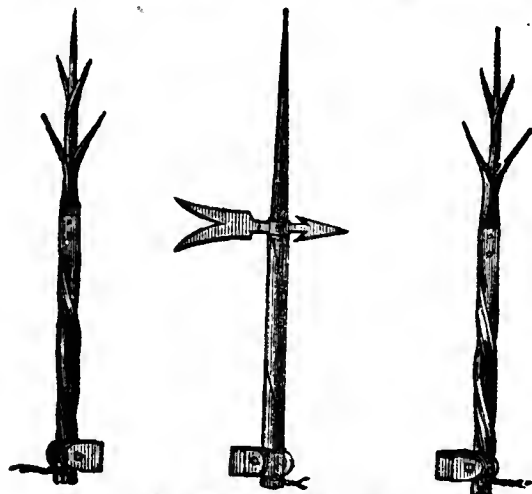
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, SEPT., 1862.

NO. 12.

## September.

To us, September is an interesting month, for it marks for us a notch in the check roll of time, an ingathering of the years that belong to us especially, and which all end in this month. To the fruit grower, September is the cornucopia of the months; to the farmer, it is rich in the products of the field, and the time that he rests him from the long harvest days, attends the county fair and makes ready to gather in the products that the milder sun is ripening for his use. He now realises the promise of Spring and reaps the guarantees of Summer.

The active summer has not as yet fully passed away, only so far as cultivating the soil is concerned. Everything is yet making a vigorous growth, and the farmer, for the first time since the opening of Spring, is comparatively at leisure. Let him enjoy it while he may, for so soon as the frosts of October reaches his fields, he must be busy. Work, though not so driving, is not all suspended, and in September he will find much to do.

The cellar must be made ready for the vegetables, the cribs for the corn, and the barn, stables and sheds put in order. Fruit will, to some extent, need be looked after, and the winter wheat sown. All of these must have the proper attention, and yet the labor is comparatively light, the days are mild and the nights cool and invigorating. On many accounts it is one of the most delightful months of the year, and we congratulate those who, like ourself, took their first look out into the world from amid its genial influences.

## Planting and Cultivating Corn.

Mr. N. S. KETCHUM, of Cordovia, Ill., sent us a description of his machine for planting and cultivating corn. We see no reason why such a machine will not do good work, and lessen the cost of both planting and cultivating. It is now conceded that corn planting and its culture must be done with the aid of two horses, and it therefore becomes a question as to what kind of a machine will best do the work. Parties wishing further particulars can address Mr. K. as above.

## A Visit to Dr. Pennington.

Dr. Pennington, as all ought to know, is a large farmer north of Sterling, in Whiteside county. His farm commences near the village, but you travel along a pleasant road, flanked by large fields of grain, some four miles, before you reach the family mansion, which is just north of the Elkhorn, a rapid stream that gives his farm a most excellent drainage, and whose banks supply an abundance of timber.

When we arrived, the shades of evening were just shutting in the view of the out-laying groves, the rolling prairie to the west, and the timber belts of the Rock and Elkhorn rivers. But with the early morn, cased in a pair of the Doctor's India rubber boots, we sallied forth with him, wading through the dewy grass and the blooming buckwheat, that spreads its mantle of white throughout nearly a hundred acres of orcharding, now loaded with its growing fruit. The hum of bees and the chattering of birds was the music of the morning as we

brushed aside the dew that lay like a shower over the teeming vegetation. A hundred and thirty swarms of bees are out for their morning meal, and singing as they go, impress one with the idea that the air is filled with their busy wings. Thousands of birds are after the early worm, and caroling the pleasure they enjoy. The buckwheat is giving off its balmy odor, with the fast receding dew that now weighs down its delicate branches, and which the sun is rapidly sending aloft to gather further stores of ammonia, with which to invigorate the needy plants when the sun shall again sink into the west. The apple trees are festooned with fruit, some of it just beginning to show the first faint pencilings that give token of maturity. It is a gorgeous picture, this mingling of orchard, of ripening harvests, of rich meadows, of wide spreading fields of corn, of neighboring groves, and belts of river forest, that fade out in the dim distance. The sun is sending his floods of light over the forest walls of the Elkhorn, and the dew is glistening fainter and fainter on tree and shrub. From this opening in the orchard forest, we see the harvesters marching into yonder field. Hark, 'tis the music of the reaper, as it sings to the falling grain; it is the song of triumph—a melody that is appreciated by him who has swung the cradle day after day, or who has grasped the sickle and gathered by hand the lagging harvest.

We are taking lessons and must listen: "Buckwheat is the best of all crops to sow in a bearing orchard; put corn in the young orchard for five or six years, and then sow buckwheat; plow the ground the last of May, and harrow thoroughly. If the crop is good, and not too much shaded, you can harvest it; otherwise let it fall on the ground. Sometimes I mow it in August and let it lie—it keeps the ground loose, answers as a mulch, is cheap, and insures me a good yield of well grown fruit.

"I have cultivated the Buckingham apple for a long time; obtained my first trees of

a Mr. Masson, a Swiss farmer near Moro, in Madison county, in 1839. The trees bore in four five years after setting out; is an early and abundant bearer; is as hardy as the Yellow Belleflower; the fruit is not so large as when grown in the south part of the State; is very valuable for drying. On the whole it is a profitable late fall and early winter variety, and should be more largely planted. Maryland Queen is a great bearer, one of the most profitable; tree hardy and fruit large and fair, season August and September. Yellow June is the early apple of Illinois, equal in quality to the Red June, and more productive. [Doubtless Kirkbridge White.] Duchess of Oldenburgh is another of our most profitable summer apples; fruit is large and showy; tree hardy and an abundant bearer; season August. Don't fear planting too many of these and the Yellow June. Early Nonpareil, or None Such, had of Masson; don't know its true name; an upright grower, a great bearer, ripe in September and October; a sharp acid; valuable for cooking, in fact the best of its season, and a favorite for eating with all who like a clear, well defined, acid flavor; it is worthy of more space in the orchards; for jelly it has no equal; the fruit when ripe is rather too soft to send a long distance to market, although it is well striped with red, it will show the slightest bruise. Early Pennock, a very profitable apple for market, but the tree blights badly. The Keswick's Codlin is of little account with me, and I fear, friend Dunlap, you have written it up too high; it blights badly, and is less valuable as an early bearer than Cooper's Early White. It is only a moderate bearer and the fruit is too acid and coarse; see that row of Codlins, nearly ruined with the blight; I know every one else praises it, but here is the testimony that I present against it; is it not conclusive?" [We have never seen the Codlin do so poorly as here, and must admit the strong argument against it, but when we recur to our own heavily laden trees of the



Codlin and know that no other sort has paid so well in market, we feel disposed to wait for further adverse facts.—ED.] “The Winesap is always hardy and loaded with fruit; it is one of the most profitable sorts for winter. Willow Twig blights, but it will pay under any circumstances; it is one of the best. Fulton has been overestimated by both Harkness and Overman; it is not the apple for us; is a moderate bearer of rather coarse fruit. Red June is, on the whole rather a profitable fruit, but not so much as Yellow June; its value is that it is a few days later. Roman Stem is not satisfactory; the tree blights and the fruit is too small and not enough of it. Here is my last orchard planting; you see the main rows are set twenty-four feet each way, with an intermediate row of small growing upright sorts, for shelter, such as Sweet, Yellow and Red June, etc. I believe in protection, and while you use timber belts to this end, I depend on close planting.”

But Doctor, recollect that the groves and timber belts almost shut you in; nature itself has belted your grounds and close planting is all you need. The Grand Prairie is a different place altogether. There the winds have free play for long, long miles, and we need not only artificial belts, but close planting and low heads.

“Well, perhaps you are right, but you have run the heads too low. I don’t care how low you start the branches, but they must be thinned out and pruned; you and Coe and some others are going too far in that direction. After setting the trees Mr. Coe makes it his boast that no pruning knife mars his trees, you advocate thinning out at the outset which is a little advance, but I tell you the knife must be freely used.”

Very well, Doctor, but Mr. Coe has been the most successful orchardist in the State.

“Yes, but as his trees grow older they will show the bad effects of their early want

of training. You see this young orchard is planted to corn, a dwarf Yankee sort that will not shade the trees and just about pays for culture. I have tried grass, but in grass land I lose nearly all of the fruit with the apple worm; not so with the buckwheat, which I esteem highly for its anti-worm quality.”

The two past years the apple crop has been poor—this year good, though the blight is making sad work with many varieties. Pears and Siberian Crabs are also badly affected.

#### SOME CORN.

For the past three years the price of corn has not been satisfactory, and the crop is still on hand, amounting to 30,000 bushels, being the surplus after feeding what was required and the tenants selling their part of the crop. The cribs are well made, are twenty-four feet wide, with double roof, and so constructed that they are easily filled. First, you drive through the center and fill the sides, which are seven feet each; an air space of a foot on each side is then made of boards, when the middle is filled in. The whole is in as good order as when first brought from the field. The roof is made of fencing and channeled at the edges, Such a crib will last a long time and will keep the corn in good order. The middle part has a strong floor on which to drive a loaded team, and on which the shelling is done.

#### AMONG THE BEES.

In the orchard, in front of the house, are one hundred and thirty stand of bees. They have made a large amount of honey from white clover, and are now at work on the buckwheat. Mustard and rape are both favorite bee food; a patch of the former near by is swarming with bees. The Doctor intends to sow both rape and mustard next year. The rape will be first in season, to be followed by the mustard. Buckwheat makes a large amount of honey, but it is of

an inferior quality. No patent hives are used. The inside of the hive is eleven by thirteen inches, and fifteen inches high; an air chamber of two inches in the clear passes up through the chamber of the box in which the small boxes are placed. The bees work out from this air chamber into the side of the boxes instead of from below. These boxes are made twelve inches long, six wide and four high, of thin pine stuff, and made almost or quite water tight. The bees are kept in low sheds about four feet high in front, five at the rear and four wide, with the roof some five feet wide. The stands are placed on scantling, about a foot from the ground.

#### A CAEAP ICE HOUSE.

The house is made fourteen feet wide and thirty feet long, is simply a shed with an almost flat roof, but with the boards channeled at the edges to carry off the rain water. The ice house is made in the south end of this shed, and is fourteen feet square less a wall of eight inches space, filled in with saw dust and shavings. The floor is a foot from the ground, laid a little slanting to drain off readily, and covered eight inches deep with saw dust before putting on the ice; it is then filled to the roof, and eight inches of saw dust put over it. The sides are about seven feet high; in the south end is a ventilator of slats, six feet long and a foot high, and the partition that separates the ice from the shed is not carried above the eaves of the shed; of course it is all open above, simply an open shed, used for wood at the north end, and the ice house filled with blocks of ice and covered over with saw dust. Over the top of the ice is set jars of fruit, fresh meat, milk, etc. When ice is needed, the saw dust is shoveled from a block, the amount required taken out, and the space recovered with the saw dust. It can be taken out at all times of the day; nothing will mould in this house, as is the case in the old fashioned houses. We shall give a drawing of it as soon as we

can find leisure to do so. Had we not seen this house and its practical demonstrations, we might have had some doubts of its practicability, but it is the cheapest and the best ice house that we have seen. Its conveniences should recommend it to all who can appreciate an ice house. We will give minute instructions how to build it before the ice season arrives.

Thus was spent one of the nights and mornings during the great reaper trial near Dixon, taking a ride of ten miles each way from the grounds through a part of the richest spring wheat district in the State of Illinois.

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FROG HUNTING IN CAYUGA COUNTY.—The Auburn Advertiser says the catching of frogs at Montezuma, has become quite a considerable trade. For two or three seasons past two men have made the impaling of frogs their business. Every other day they ship from Auburn a barrel of frogs for the New York or Buffalo market. They make very handsome wages. The method of securing these *basso profundos* of the marshes is very similar to spearing for fish. The men paddle off through the marsh in the night with a dark lantern. They approach the haunt of the frog very quietly, and when near enough throw their dart with a certainty acquired by practice, always hitting them back of the head, killing them instantly. The hind quarters are then carefully skinned and cut off, packed in barrels and sent to their destination. They generally secure two or three hundred in a night; and are paid \$6 a hundred."

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—A disappointed candidate for the office of constable, remarked to us, recently, in speaking of men who would sell their votes, that they were "as base as Æsop of old, who sold his birthright for a mess of *potash*!"

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—An exchange paper, under the head of "Good Advice," advises young men to "wrap themselves up in their virtue." A cotemporary well says, "Many of them would freeze almost to death if they had no warmer covering."

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—A man with a long head is not very apt to be headlong.

Report of Fruit Committee of Illinois to American Pomological Society.

P. BARRY, Esq., *Chairman Local Fruit Committee, American Pomological Society, Dear Sir:*—It is with no small misgiving that I attempt to give you a list of varieties of fruits that shall prove best in various parts of our State, reaching as it does through nearly four hundred miles of latitude and extending over a range of elevation of from three to eleven hundred feet above the level of the sea.

The great volume of heated air driven north by the steady pressure of the trade winds during summer, elevates the average summer temperature and thus gives us a summer climate equal to three or four degrees of latitude below that of the slope lying east of the Blue Ridge. This is followed by a winter correspondingly colder, making the contrast great, and in many instances inflictin irreparable injury on all hard wood-ed plants not well ripened. It is practically growing an orchard in latitude thirty-six and wintering it in forty. From the peculiar nature of our climate, we have little snow, while in winter the number of clear days is remarkable. The sun's rays thawing the ground and starting the sap, followed by intense cold at night.

To these influences can be charged the difficulties in fruit growing on the prairies of the west. For the growth of trees the soil is favorable and so is the summer climate, while the great drawback is in the sudden changes during winter. Whenever, by artificial means, this normal condition of the climate is overcome, there is no difficulty in growing any of the apple or pear family that do well at the east. By protection with timber belts, close planting, thorough draining and low headed trees we can succeed with all varieties of the apple in all parts of the State. The Baldwin which, in exposed prairie locations, is one of the first to succumb, produces when sheltered from the wind in closely planted borders, its usual crop, whether in the middle or the north part of the State. In the south part, usually denominated Egypt, less protection of this kind is required. The same reasoning holds good with many other varieties popular at the east, but at present of little value at the west.

The list furnished below has particular reference to the prairie exposure, with the general understanding that all desirable sorts can be cultivated with more or less profit when the conditions indicated are supplied.

The summer blight effects some varieties more than others. Taking all things into considera-

tion the following list will be found valuable to the orchardists of the State of Illinois. Mr. Coe says: "In regard to Smith's Cider and Rambo, a dry soil is indispensable, and the latter must be either top-grafted or budded, standard high. Rowle's Janett is better root-grafted. We have had but one peach crop in the last twelve years. The curculio destroys all the plums. Pears have not succeeded well, and I doubt if they can be grown with profit. Cherries are a failure with the exception of Early May (Kentish of Downing), and perhaps two or three others of the Morello family."

Mr. Minkler has the same experience. These two members of the Committee, represent, the Lake and Mississippi region of Northern Illinois. Mr. Coe has a sandy soil, and Mr. Minkler a clay loam overlaying the Niagara group of limestone which crops out at intervals in the neighborhood.

LIST OF A. S. COE, PORT BYRON, ROCK ISLAND CO.

Name.	Best 6	Best 12	Best 20	Best 1000
Yellow June.....	5	3	2	5
Early Harvest.....	.....	.....	.....	.....
Re d June.....	.....	.....	2	.....
Sweet June.....	.....	2	2	10
Dana, ... ..	.....	.....	.....	.....
Benon .....	.....	.....	.....	.....
Keswick's Codlin.....	5	3	2	10
Early Pennack.....	.....	2	2	10
Maiden's Blush.....	.....	.....	.....	.....
Golden Sweet.....	.....	.....	.....	.....
Summer Queen.....	.....	.....	.....	.....
Summer Pearmain.....	.....	.....	.....	.....
Rambo.....	10	6	5	30
Maryland Queen.....	.....	.....	2	10
Monarch.....	.....	.....	2	10
Buckingham.....	.....	.....	.....	.....
Fall Pippin.....	.....	.....	.....	.....
Snow.....	.....	.....	.....	.....
Domine.....	.....	.....	5	30
Minkler.....	.....	.....	.....	.....
Smith's Cider.....	15	8	6	40
Waggoner.....	.....	.....	.....	.....
Winesap.....	30	18	12	230
Jersey Sweet.....	.....	.....	.....	.....
Rawles' Janett.....	.....	18	10	150
Yellow Bellflower.....	.....	5	4	.....
Tollman Sweet.....	.....	5	5	25
Willow Twig.....	35	20	24	300
English Golden Russet .....	.....	.....	.....	.....
Northern Spy.....	.....	.....	.....	.....
White Winter Pearmain.....	.....	16	75	75
Fulton .....	.....	.....	15	15
Pomme Grisse.....	.....	.....	.....	.....
Newtown Spitzenburgh.....	.....	.....	.....	.....
Little Romanite.....	.....	.....	50	50
New York Pippin.....	.....	.....	.....	.....
Seeknofurther.....	.....	.....	.....	.....
Romanstem .....	.....	.....	.....	.....
Jonathan .....	.....	.....	.....	.....
Peck's Pleasant.....	.....	.....	.....	.....
	100	100	100	1000

LIST OF S. G. MINKLER, SPICE GROVE, KENDALL CO.

Name.	Best 6	Best 12	Best 20	Best 1000
Yellow June.....				
Early Harvest.....	10	8	5	50
Red June .....	10	8	5	50
Sweet June.....				
Dana.....				
Benoni.....		7	5	50
Keswick's Codlin.....	20	8	7	70
Early Pennock.....			5	50
Maiden's Blush.....		8	7	70
Golden Sweet.....				
Summer Queen.....			5	50
Summer Pearmain.....				
Rambo.....				
Maryland Queen.....				
Monarch.....				
Buckingham.....				
Fall Pippin.....				
Snow.....	20	8	7	30
Domine.....		10	5	50
Minkler.....		10	5	50
Smith's Cider.....			5	30
Waggoner.....			3	50
Winsap.....	25	10	7	50
Jersey Sweet.....		3	3	30
Rawle's Janett.....		5	5	
Yellow Bellflower.....	15	5	5	
Tollman Sweet.....		3	3	
Willow Twig.....		5	5	
English Golden Russet.....		5	5	
Northern Spy.....		3	3	
White Winter Pearmain.....				
Fulton.....				
Pomme Grisse.....				
Newtown Spitzenburgh.....				
Little Romanite.....				
Newtown Pippin.....				
Sweet Romanite.....				
New York Pippin.....				
Seeknofurther.....				
Romanstem.....				
Jonathan.....				
Peck's Pleasant.....				
	100	100	100	1000

LIST OF J. H. STEWART, QUINCY, ADAMS CO.

Name.	Best 6	Best 12	Best 20	Best 1000
Yellow June.....				
Early Harvest.....	4	3	2	
Red June.....		3	2	
Sweet June.....				
Dana.....			2	
Benoni.....				
Keswick's Cadlin.....				
Early Pennock.....	3	3	2	
Maiden's Blush.....	4	4	3	
Golden Sweet.....			2	
Summer Queen.....				
Summer Pearmain.....		3	2	
Rambo.....	5	4	3	
Maryland Queen.....				
Monarch.....				
Buckingham.....		4	3	
Fall Pippin.....			2	

Name.	Best 6	Best 12	Best 20	Best 1000
Snow .....				
Domino .....				
Minkler.....				
Smith's Cider.....				
Waggoner.....				
Winsap.....		20	10	200
Jersey Sweet.....			2	
Rawle's Janett.....	50	20	10	250
Yellow Bellflower.....				
Tollman Sweet.....				
Willow Twig.....				250
English Golden Russet.....			10	
Northern Spy.....				
White Winter Pearmain.....				
Fulton .....				
Pomme Grisse.....				
Newtown Spitzenburgh.....				
Little Romanite.....				
Newtown Pippin.....		16	10	100
Sweet Romanite.....			5	
New York Pippin.....			10	200
Seeknofurther.....			5	
Romanstem.....	36	10	5	
Jonathan .....		10	5	
Peck's Pleasant.....			5	
	100	100	100	1000

The following list would probably give satisfaction in all parts of the State. Stannard has only been cultivated in a few orchards at the north but from the vigor and hardiness of the trees, its great productiveness, fair appearance and long keeping quality of the fruit render it one of the most profitable of all our winter varieties:

Name.	6 var. 100	12 var. 100	20 var. 100	Orch'd 1000
Yellow June.....	5	3	2	50
Red June.....		3	2	20
Sweet June.....		2	2	20
Keswick's Codlin.....	15	10	5	50
Early Pannock.....		3	2	20
Maiden's Blush.....			2	50
Summer Queen.....			2	50
Yellow Injestrie.....			2	00
Holland Pippin.....			3	10
Rambo.....	20	10	10	50
Snow.....	20	20	15	100
Winsap .....	20	15	10	100
Willow Twig.....	15	15	15	100
Smith's Cider.....		10	5	50
Late Golden Sweet.....		2	2	10
Paradise Sweet.....		2	2	10
Rawle's Janet.....			5	50
Yellow Bellflower.....			5	50
White Pippin.....			5	50
Stannard.....	5	5		100
Domine.....				20
W. W. Pearmain.....				40
	100	100	100	1000

There are many other varieties that promise well and will doubtless prove valuable, but the

above list with the exception of late Golden Sweet and Stannard have had such a trial in all parts of the State that they can be confidently recommended. At the south part of the State Rawle's Janette should change places with snow as to numbers. Willow Twig might also take the place of Stannard to good advantage.

#### PEARS.

At this stage in the history of Pear culture in this State, it would be premature to make up a list. On the whole, pear culture has not given satisfaction, though in some locations good crops have been realized. The blight is the great drawback. Bartlett has done well in all parts of the State. Madaline appears to be a favorite also Stevens' Genesee, Flemishes' Beauty, Belle Lucrative, Louise Bonne de Jersey, and a few others. For a standard pear Flemish Beauty may safely be set at the head of the list. Doyenne de Eta, Madaline, Bartlett, White Doyenne, Louise Bonne de Jersey, and Winter Nellis, would make a list of six acceptable varieties.

#### PEACHES.

The member of the Committee engaged in peach culture has failed to report, probably from the reason that sufficient experience has not as yet indicated the best varieties.

Respectfully submitted on behalf of the Committee.

M. L. DUNLAP.

*Champaign, Ill., Aug. 4, 1862.*

—As a general thing, fruit lists have done more to mislead than to direct us aright. It induces us to exclude all others and to adopt the varieties named, whereas of the fifteen hundred or two thousand varieties but few, comparatively, have had such a trial as will place them either inside or outside the list. We have several varieties now on trial that we think will prove as good or even better than those in the above list, for the very good reason that they have not had a general trial. We shall therefore expect additions from time to time to this list. It is our purpose to gather up facts, not set forth theories. The culture of fruits with us has been a study for years, and we are just beginning to grasp some of its truths—we have discarded its pedantry and have turned to the daily demonstration of facts. The meeting of the State Horticultural Society in Chicago, will furnish a mass evidence of no small value. The American Pomological Society have given up the idea of a National list, in this way they will accomplish

some good if they do no harm. They will disseminate many facts valuable to us all. We can but urge upon tree planters to select such varieties as have proved hardy and productive in their neighborhood rather than such sorts as have a reputation at some distant point.

We are satisfied that this is yet to be the great fruit growing State of the West. Let us look to what we plant. ED.

#### Report of Fruit Committee.

We have elsewhere given the report of the Local Committee of the American Pomological Society, and we now give extracts from the reports of members to the Chairman.

Mr. A. S. Coe, of Port Byron, says: "It is now something more than twenty years since a few intelligent horticulturists began to turn their attention to fruit growing in this portion of the State. They soon found that they had undertaken an enterprise involving no small amount of labor.

The exceeding fertility of the soil, great heat of summer, severity of winter, together with high winds throughout nearly the year, make up a sum total that is truly appalling. They, however, went resolutely to work, to overcome all difficulties that skill and patience could subdue. The severe winter of 1854-'5, proved that many varieties then in cultivation must be abandoned.

Twenty years ago the peach was cultivated with some success, producing fruit at least as often as once in three years, but has produced but one crop in the last ten years. Early cultivators were more or less successful with the plum, but of late it has proved almost an entire failure from the attack of the curculio.

In pears so little has been done as yet that I am not prepared to say what the prospect of success with further experience may be. But from present prospects I fear they can never be grown with profit.

In the cultivation of the apple much progress has been made, simply because the 'conditions' are better understood.

After discarding the more tender varieties, retaining a few of the half hardy, because productive, and selecting dry soil in making additions to orchards, cultivators have the pleasure of seeing their trees annually bending beneath heavy loads of fine and luscious fruit."

J. H. Stewart, writing from Quincy, Ill., says: "I shall leave this pear question to you, as I cannot recommend any one to plant a thousand



pear trees of any variety that I am acquainted with. The following varieties succeed as well in this part of the State as any with which I am acquainted:

White Doyenne,	Bartlett,
Seckel,	Flemish Beauty,
Winter Nellis.	

Of Peaches, the best six are:

Large Early York,	Crawford's Early,
Crawford's Late	Heath Cling,
Hayworth's Early,	Troth's Early.

Best twelve:

Troth's Early,	Crawfords Early,
Large Early York,	Red Check Melacaton,
Hayworth,	Coollages Favorite,
Old Mixon Cling,	Old Mixon Free,
Early Tillottson,	Lagrange,
Heath Cling,	Crawford's Late.

Fruit culture is making rapid progress in this part of the State, and hundreds of acres of orchards are being added annually.

On the Missouri side of the river, nothing is being done in this direction, though the country is well adapted to fruit culture."

Mr. S. S. Minklee says:

"I have resided here for twenty-eight years, during which time I have seen many attempts at orcharding, and most of them failures, for the want of proper care and knowledge of planting, mode of training after culture, and proper varieties adapted to this climate. And here I may say that a large percentage of the failures have been in consequence of trimming too high—they say so as to plow close to them—consequently, in this windy country, planted without staking, they lean to the north-east; the hot sun in summer and the warm sun in winter kills the bark on the south-west side of the tree, and hence the trees die, and people conclude that this is not a fruit country.

Another cause of failure is planting an orchard in one corner of a field, then suffer cattle to have full sway and to *horn prune* at their leisure.

Another criminal failure is seeding down or sowing small grain in the orchard under ten years, and then if seeded at all after that age, it should be with clover and that not taken from the ground. There is just as much sense in seeding down a cornfield directly after planting as an orchard under the above age. The trees become stunted and lousy and live a while at a poor dying rate, and they are led again to conclude that this is not a fruit country.

But since the North-Western Fruit Grower's

Association sprang into existence, and the State Horticultural Society shedding its savory influence over the land, we see a decided difference throughout the limits of its sphere. People thereby have learned the varieties adapted to their soil and climate, and the necessity of adopting the low head system. And now the Society has another important point to bring the minds of the people to, and that is to teach them to think as much of a fruit tree as they do of a hill of corn. When I think we can safely say, We have a fruit country.

In regard to the list. You require that those in it must be *generally and successfully* cultivated for a considerable period of time; hence this list. There are some varieties that I know to be valuable, but not by my own experience, for I have not fruited them yet, though planted extensively of them: the Jonathan, White Peppin, Carolina and Fulton.

The above varieties all stand transportation well. The ratio of early fruit might be greater if near market, as early fruit yields a greater profit.

I wish to be excused from pears and peaches, as I have tested but few varieties of pears and less of peaches."

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From the Country Gentleman.

### Depth for Planting Seed.

A great deal depends on the right depth for planting seed. It must vary somewhat with the nature of the soil, its condition as to moisture and pulverization, and other causes. If every farmer would spend one day in each year in experiments to determine the best depth, the knowledge thus gained would soon be worth hundreds of dollars to him. Five dollars worth of labor expended in such experiments would doubtless return five thousand per cent. dividends. It would be well therefore to make the investment.

In illustration of the importance of the right depth, we mention a single experiment. A hired man was directed to plant some beet seed, but instructions were omitted as to the right depth. It was found afterwards, that, determined to do the work well, he buried the seed three to four inches deep. The error was corrected in time to have a part planted an inch and a half or two inches. The first did not come up at all; the second but feebly and sparingly, and "bad seed" and "dishonest seedmen" were suspected. Having a little seed and a strip of spare land left, the rest was planted some time afterwards. Little pains were however taken with supposed bad seed, and it was scattered carelessly on the surface, and covered an inch or less in depth. It came up profusely; and a lesson was learned as to depth, and the character of the honest seedman retrieved.

There is no doubt that the complaints that have been made in this journal, within a year or two, of the bad effects of *drilling in wheat*, instead of sowing broadcast and harrowing, have arisen from putting in the seed too deep. In order to investigate this question further, a series of experiments were commenced the past spring under our direction, by a careful hand, and his report below is fully corroborated by our occasional personal examination of the ground.

The following experiments were made on the depth of planting wheat, the soil a sandy loam, sufficiently moist for free vegetation—the depth being carefully measured, and the soil laid on the seed in even stratum:—

WHEAT—planted May 21—

$\frac{1}{2}$ inch deep.....	Came up in 5 days.
1 do .....	do 6 do.
2 do .....	do 7 do.
3 do .....	do 8 do.
4 do .....	do 10 do.
6 do .....	do 12 do.

Five weeks afterwards, there was no perceptible difference in that planted half an inch and an inch deep; that planted two inches deep was not quite so good; and so on decreasing in quality as the depth of planting increased. At six inches depth, there were but very few slender stalks.

CORN—planted May 21—

$\frac{1}{2}$ inch deep came up in 8 days—	1 inch high in 10 days.
1 do do 8 do —	{ $1\frac{1}{2}$ to 2 inches high in 10 days and looking much the best.
$1\frac{1}{2}$ do do 9 do	
2 do do 10 do	
3 do do 11 do.	
4 do do 12 do.	
5 do do 13 do.	
6 do do later, day not observed.	

About all the grains grew, although the deeper ones were so much later in reaching the surface. Five weeks afterward there was no perceptible difference in those ranging from half an inch to two inches id depth, but the others were of feeble growth as the depth increased.

OATS—planted May 22—

$\frac{1}{2}$ inch deep.....	Came up in 5 days.
1 do .....	do 5 do.
2 do .....	do 6 do.
3 do .....	do 9 do.
5 do .....	{ Later, time not observed.
6 do .....	

After five weeks, no difference was observed in half an inch to two inches in depth—quality decreased as the depth increased afterwards.

BEANS—planted May 21—

$\frac{1}{2}$ inch deep.....	Came up in 9 days.
$\frac{3}{4}$ do .....	do 9 do.
1 do .....	do 10 do.
$1\frac{1}{2}$ do .....	do 11 do.
2 do .....	do 12 do.
3 do .....	do day not obs'd.
4 do .....	do do.
5 do .....	{ Did not grow at all.
6 do .....	

Five weeks after planting, there was no difference in those half, three-fourths, and an inch deep; at two inches depth they were not quite so vigorous; but few came up at three inches

depth, very few at four inches, and none at all at greater depths.

From all these experiments we may infer, that the best depth for wheat in mellow, moist, moderately light soils, is not much over one inch deep; for corn, one inch or an inch and a half; oats, about the same or a little deeper than wheat, and beans not much over an inch, and never in any case over two inches.

We may report further in future on the growth of these plants.

—In our light prairie soils, when dry, the seed will come up where planted at a great depth but if after planting a heavy rain follows, the seed is lost. On the other hand, if planted when the ground is moist and followed by a long dry spell, much of the shallow planted seed will not come up. Thus, in the ordinary way of planting, we run the risk of too deep or too shallow planting, either of which is best under certain circumstances, and either fatal under others, all of which is beyond our control. To avoid all this risk, we have but to plant shallow as indicated in the above tables, and roll the land with a good iron roller. We have always objected to the drill system from the fact that it placed the seed too deep in the ground. Farmers and gardeners cannot be too careful as to the depth at which they deposit their seed. In the case of grass seed, we have no doubt that more than half of it never germinates, from too deep planting.

ED.

POTATO YEAST.—Five large potatoes boiled and mashed, three pints of boiling water, flour enough to make it a little thicker than flap-jacks, and one cup of yeast. This is enough to rise five leves of bread, which may be mixed with water, or milk, and will rise enough while your oven is heating. Save out enough of this yeast for your next baking.

CHICKEN POT PIE.—Wash and cut the chicken into joints; boil them about twenty minutes; take them up, wash out your kettle, fry two or three slices of fat salt pork, and put in the bottom of the kettle; then put in the chicken, with about three pints of water, a piece of butter the size of an egg; sprinkle in a little pepper, and cover over the top with a light crust. It will require one hour to cook.

—A printer down south offers to sell his whole establishment for a clean shirt and a meal of victuals. He has lived on promises till his whiskers have stopped growing.

—Why is a baulky horse like an organ? Because his leading features are his stops.

For the Illinois Farmer.

### Clover will Grow in Egypt.

FRIEND DUNLAP:—I notice that in your FARMER for July you half doubt whether clover will grow in Egypt. I think that my experience in this line will settle this question.

When I came to this section, six years ago, I bought a farm mostly under fence with good buildings, for this country, and some fruit trees, for eight dollars an acre. I thought it cheap indeed I knew that I could not hire the amount of work that had been done on the place for what I paid for the farm. Whether the soil was good or poor I did not stop to examine or to inquire, for the place seemed so cheap that I bought it without hesitation. Shortly after, on going over it, I noticed several gullies in the fields—"washed places"—so called, which my neighbors told me were caused by neglect, and that the place was worn out. This did not alarm me much, for I pursued another business for a living, and only needed the farm for raising fruit. To be very candid, I must confess here that I was no farmer, and that though I had a taste for it, everybody at once could see that I was a green hand. A year or so I found that my fruit trees did not thrive well; in short, all my crops were so poor that at last I became convinced that the place really was worn out. I had no clover or grass, and no green feed of any kind for my cows, except what they got in the woods, and it made no odds how many cows I kept, we could make no butter, and had scarcely milk enough to put in tea, saying nothing about cream. I had always been used to seeing grass, so I hired a man to sow timothy on a ten acre field along with oats in the spring. The oats rusted, the grass came up and died, and I let the field stand as good for nothing. Three years ago business changed with me. I was reputed to be very *black* in politics, and I thought it best for me to go to farming.

This is the way I commenced. I built a yard about fifty feet square on one side of a decent stable I had just erected, and put my cattle in it at night. In the morning with wheel barrow and shovel I saved the manure in a heap and under a shelter. The heap rapidly grew in size, and in the course of six months I had a large quantity of manure. Of course the people laughed at me, such a thing never having been done before. In the winter I stabled my stock, which I was able to do with much less feed than usual, and meanwhile saved the manure. In the

spring we hauled out a great many loads on the ten acre field; then it was plowed, sown with oats and clover. The clover I put on myself, it being my first trial at sowing seed of any kind. I put about half a bushel on the lot. The oats did better this time, and the clover came up, though not very thickly. Meanwhile I had put clover on another lot, and the first year after sowing, I turned in my cows, getting tired of paying twenty cents a pound for all the butter we used, which was a great deal. The cows were so glad to get it, and so hungry, and the stand so light that they eat it to the ground, and had to turn them into the road again. But in the lot I am speaking of, I did not turn anything the next year, nor the second year, till after I had mowed it, when I ran a fence through the middle to save some fruit trees in one part, and turned the cows in. The result was that the clover grew as fast as the cows could eat it, we had good cream, and we all got in the habit of eating up the butter as fast as we made it, which was a shame, for we had "sights of it," but it was so fresh and good, and so much better than meat and grease, and cheaper too, that we did not care.

Then I put manure around the fruit trees. the change was wonderful, for they brisked up and grew rapidly, but I noticed that where ever I put the manure the clover after a while sprung up, and it has now got among my strawberries, in the fence corners, and in fact all over my farm. Every day I see people looking at my clover with wonder, and as they ride by almost break their necks in looking back, for they all said that neither clover nor grass will grow here, and that there is no use of trying.

To conclude, by sowing clover I have made my farm the most valuable of any in the vicinity, and I see that others are following my example, so that in a few years I shall not be ashamed to have a man who knows what farming is ride through our settlement. I find, too, that on land any way fresh, or on any decent soil, clover will grow as well as it will any where, and that the very best thing the farmers here can do is to sow clover, for it will make poor land rich, and keep new land so. Farming, like any other occupation, is a trade, and I think that after a while I shall be a passable farmer. The natives begin to think I know something about it now. The fact is, a farmer must bring intelligence into the field with him, and it will help him a good deal, if he have an agricultural paper, providing he can read. Since I have really turned my at-

tention to farming and the reading of agricultural works, my farm has quite another aspect, and so changed is its appearance that the seasons seem to be more favorable.

DONGOLA, Union County, Ill.

N. C. M.

—Our remarks in regard to clover were more especially intended for the Basin of Egypt, or that part lying north of the grand chain. We are well aware that clover makes a good growth all south of the Big Muddy river, though comparatively little is sown. We would never need offer a premium for bad farming among the old settlers in that part of the State, for south of Carbondale we can find as many specimens as we need. Though the soil is rich, yet from its fine texture requires vegetable fibre to keep it loose and porous, so that the roots of plants can penetrate it, and for this reason no soil in the world will show such wonderful effects from the use of manure. In that climate soiling must be resorted to, and as fast as the grass is cut for that purpose the cut surface must be at once top-dressed, as the burning sun will destroy the exposed roots. We have advised our friends of this fact years since, but they will for the most part follow the practice of the *natives*, to allow their stock to run in the woods pasture.

We know that a better day is dawning for this Italia of the West. If we cannot have the oranges of Seville, we shall have the fine peaches of the South of France, with the delicious cream of the North. Nature has done much for Egypt, but up to a late day man has done but little. From this day forward we may look for a more intelligent display of man's skill. We need more men as our valued friend N. C. M. in that part of the State, and we are glad to know that they are forthcoming. No part of the continent can surpass it for strawberries, peaches, and several other fruits, and now that the world knows it, we shall soon see its resources more fully developed.

#### THE LOSS IN THE BATTLE OF CEDAR MOUNTAIN.

—The Washington correspondent of the *Missouri Democrat*, says:

Official returns of killed and wounded in the battle at Cedar Mountain, have been footed up to over twenty-three hundred. They were undoubtedly swelled, however, by including many in the list of missing, who have since returned. Gen. Pope, therefore, returned the list for revision, which will materially reduce the grand total.

#### Hard Ways of Doing Things.

The cultivator of fruit should always bear in mind that the best way to get rid of destructive insects is to kill them. The various remedies, short of this course, are often more expensive or laborious than direct slaughter, and commonly inefficient at best. As an instance, we see the old remedy of tansy for the peach grub going the rounds of the papers again. This remedy may be efficient, yet while the owner of a thousand peach trees is setting out a thousand tansy plants at the foot of his trees, and nursing and protecting them, to say nothing of the impediment they would constantly occasion to good cultivation, he might go over an orchard of ten thousand trees and with the point of his knife destroy every grub in the bark, the external indication of which, by gum and sawdust, quickly enables him to know where to look. We know by experience that a single man will effectually clear many hundred trees in this way in a single day, and a repetition of the work to two or three times a year will keep an orchard clear, where the insects are abundant.

There are many other illustrations of the same principle, such, for example, as syringing young fruit trees with lime, tobacco, etc., to repel the curculio, the labor of such repeated application being generally greater than that of killing the insect by the jarring and pinching system. There are a few instances where insects may be destroyed by wholesale, as, for instance, the aphids by soap suds, and the currant worm by dry caustic lime; but there are also many others where it would be more profitable to hire a man to pick worms and bugs by the day, with his thumb and finger, than attempt to frighten them away by outside influences, whether it is scare crows for birds, miasms for mosquitoes, or pellets of soft grass for pilfering boys. An active man or boy will capture singly twenty insects a minute when they numerously infest shrubs and bushes, which is 1,200 an hour, or 12,000 a day, and is more efficient than offensive nostrums, that often do more harm to vegetable growth than to thick-skinned worms, and hard-shelled beetles. Where insects may be shaken into vessels of hot water by wholesale, such a mode is, of course, to be preferred. We have nearly always found direct attack the best way, and very few day's work in the aggregate will keep most gardens clear of them.—*Country Gentleman*.

☞ The career of one military charlatan has finally been cut short. General Benham's name has been stricken from the rolls of the army. Those who have known him will have only wondered that the result did not come sooner.—*Cor. Mo. Democrat*.

☞ Vance, the conservative candidate for Governor in North Carolina, is reported elected by 25,000 majority. If it were not for the tyranny of the Confederate rule, this would be called a Union victory.

### The Great Reaper Trial.

No event in the progress of rural improvement has for a long time been of such vital interest to the farmer as the late reaper trial at Dixon. The value of the trials at Syracuse, at Salem and Urbana had faded out before new improvements that were rapidly changing the aspect of affairs. Iron has been gradually superseding the use of wood to a great extent, while self-rakers, headers and binders were each struggling for the mastery, and a vigorous and healthy competition was making close comparison with adjustability, durability, cheapness, rapidity of work, ease of draft, of delivery and of repair. Thus genius has been giving to the harvest field a new enstalement of values.

The State Society could not have taken a more opportune time to call together and exhibit to the western farmer the valuable improvements that had been so silently maturing for his use. At no time have these improvements been so welcome, from the withdrawal of such large enstalements of labor as at the present, to fill, in part, the void thus made.

What the Merrimac and the Monitor was to the old navy, the new improvements will be to the old family of reapers, not that the new Monitor is yet fully constructed, but the idea is born, and its infant hands presents the power of a giant; the harvest field is to see a revolution, potent and powerful for good. It was with a keen eye that inventors and manufacturers watched each new born thought that had been given form, and nothing escaped them, whether it was a new cutting plate, a new hand to grasp the bundles, *the devil's fork*, or the iron binder—all came in rapid review before them. These will go on the trestle board, have their curves and motions and relative values measured, and lo the Monitor will come down sweeping the harvest field and gathering with its iron grasp its golden products. Some of the old craft can be rebuilt and yet do good service, but the great republic of harvesters will most implicitly rely upon the new.

The exhibition (for we do not propose to call it a trial,) has proved that no one machine on the ground is, in all respects, the best, but that certain new combinations must be formed by inventors that shall be another proud triumph for the great grain fields of the west.

It is to be regretted that a thorough trial could not have been had, so as to settle forever certain conditions and elements that are more or

less involved. Whether the Board had before them the ill-starred report of the "scientific committee on steam plowing," or some similar hobgoblin we know not, but certain it is that they concluded to rely upon their own unaided efforts to make the examinations, in departments of mechanics to which their previous habits of life had not fitted them in any very eminent degree. That they should, under such circumstances, fail to satisfy themselves, much less to meet the just expectations of a discriminating public is no great matter of wonder. As a trial, in the ordinary use of term, it was a complete failure, while as an exhibition it was a proud and valuable triumph of mechanical genius, not only to the farmer, but to the inventor and manufacturer, the result of which will mark a new era in the progress of the harvest field.

When men assume public positions, their acts are subject to public inspection and criticism, for there is no human power so high that it is beyond our reach, or that its dignity may not come down to be judged by the ordinary rules of common sense. The members of the committee personally we hold in high esteem, but as a Board we are well satisfied that they have committed grave errors of judgment, and done that in their official capacity that as individuals they would not wish to endorse. In the course of our remarks we intend to point out the errors of the Board to some extent, and this shall be done in all kindness, for we believe that in all their acts they have honestly endeavored to make themselves useful to the country. Since the failure of the State Fair at Big Muddy, a part if not all of the members of the Board have not been pleased with the course of the public press, and to prevent any misunderstanding at this time, concluded that they would keep their own secrets, look wise and stand forth on their dignity. It is true that they had advertised a public trial of machines at which everybody and his wife was invited to be present. Editors of agricultural journals and whose columns had made these announcements at the request of the Board were assured that they would be particularly welcome. Three of these journals were represented by their editors in chief, and one by its associate, yet these gentlemen were as fully excluded from this public trial as the farmer who had sacrificed his time and money to investigate and compare the relative value of the various reapers. None but the Board who had decided to act as an awarding committee were admitted to the grounds, and the trial which had been promised



as a public one, dwindled down to a private exhibition to the members of the Board, while the people and the press were allowed to look on at a distance. To see the Board of the Agricultural Society of the great State of Illinois thus belittle itself was humiliating in the extreme. It was a most forcible illustration of the wonderful sagacity of the beleagured Ostrich, but we hope that there was no artifice at had to perpetuate its memory so that it may soon be forgotten.

The stubborn courage of the Board to act as a committee of awards, had, we are assured for its foundative economy in its financial arrangements; but this we may at once mark down one of the grave errors, worthy of no small amount of censure, as we shall show when we come to the real parties who footed the bills.

#### THE SCALE OF POINTS.

In the first place, a scale of points should have been agreed upon and their relative values set forth and these made public. This was not done. It is true that the Secretary or other person had marked certain points in the report of the Sycamore trial, which might have been intended by one or two of the members for a scale of points, but that the Board had drawn up or formerly adopted a scale of points, we deny. We have heard, though we have not seen it, that the Board, since the trial, published a scale of points, but if they have, it is one gotten up since the trial. At the request of the Board, the exhibitors got up a scale of points, but to this no relative value were attached, and the Board attached none during the trial. We challenge the Board to gainsay these facts. We therefore charge, that really the Board had set up for itself no guide by which to judge of the relative value presented. That in self defence, they have since fixed upon one we have no doubt, and it is possible that the press may have stimulated them to this and other judicious acts. The truth must stand forth as charged at the time, that a very good reason for not giving the scale of points, with their relative value, was simply that they had none to give. An editor of one of our agricultural journals, and who we believe has never worked on the farm, much less worked a week in the harvest or hay field, excused the Board for excluding visitors from the new cut grass, for the reason that after raking, the stubble could not be so well compared, from treading that it might receive. This, of course, will prove satisfactory to the three or four hundred farmers present, when some ten acres of

grass was cut. The gentleman should be sent to the country and be allowed bread and milk for breakfast for a week at least, in return for such a valuable discovery.

#### THE DYNAMOMETER.

This instrument, always uncertain in its results, is only valuable as giving a comparative value; to do this all the machines must be drawn at the same speed, otherwise it is of no value. Every school boy knows that power is measured by raising a given weight in a given time; it is, therefore, evident that a machine cutting a given width at three miles an hour, will require more power to draw it at four miles. From the fact that a different team and different speed was used on each machine, it may have been well that the power thus most unscientifically obtained should have been withheld from the press at least, for in most cases it would have given erroneous value to the machines drawn by spirited horses, whose drivers did not ballance the speed by a judicious draft on the lines. Some of the machines were new and put in the field for the first time, thus adding to the draft. Mr. Whiting who had charge of this instrument, labored most faithfully to do justice in the premises, but from the bad arrangement, was unable to do so. In one instance we saw him refuse to apply the instrument when gross injustice would have been done. We are quite sure that he had little faith in its value as applied. Under the circumstances, we would put no faith in the draft thus obtained.

We have used this same instrument on our farm, and with the same team and same speed, could only make an approximate estimate of the relative draft.

#### THE PUBLIC TRIAL.

We are no advocates of public trials of agricultural implements when they are to undergo a severe scrutiny, but on the other hand that they should be put in the hands of a competent committee, who will give their time and attention to the subject, and try each one separately, and thus one by one, compare them by certain standards that shall, at all times, represent constants in the scale of points. To this end, we would not like to be followed by a crowd of spectators, to call off our attention. A trial of this kind would be of more value to the farmer and manufacturer than the public ones; but when an agricultural society advertise a public trial, which is conducted at the expense of inventors,

or those who enter their machines for trial, it is but a mockery and a cheat to make it otherwise. By public trial is meant that all shall have a proper opportunity to see for themselves, that all the facts, as the trial progress, shall be at once announced to the people, in fact there can be no secrets withheld, and so soon as the awarding committee have come to any conclusion the facts are to be given to the public. On the other hand, in a private trial or trial by a committee to examine, and report by themselves all can properly be withheld for the final report. On the one, the people and the press are not to be snubbed with impunity, while in the other, they have no business to be present. The place of exhibition of agricultural implements is very properly at the various fairs, while trials in the grain or other fields, should be held private and only by the examining committee.

We shall now proceed to speak of the exhibition as it progressed from day to day.

#### FIRST DAY.

*July 22nd.*—The ground for the trial of mowers is about a mile from the centre of the city, and on the farm of Mr. Chas. Dement. The grass is timothy, mixed slightly with red down; the land slightly rolling, the bottom smooth, the grass standing well and will turn about one and a half tons to the acre. It is a most excellent place for an exhibition of mowers, but not well calculated to give them anything like a test, for it is not probable that the worst possible mower in the state if put in fair cutting order should fail. In fact, no mower should fail to do good work in such a field, yet the sequel did show just such a result.

#### THE LOTS.

Fourteen mowers had been entered for the trial, and a lot of an acre each had been staked off by the surveyor, Mr. ——. The manner in which these lots were laid off and designated, reflects no small credit on the good taste of the surveyor, and should be taken as a pattern on all similar occasions.

At all plowing matches and similar trials, there is more or less of delays, but in this case the grounds were always ready, plainly marked and numbered. The mowers had not all arrived, and but four or five of them were put to work until the morning of the 23d.

#### SECOND DAY.

A strip of some rods in width had been cut along the margin of the field on which the spec-

tators were allowed to stand, but not permitted to enter the cut stubble, but treated like children attending a fancy show. To-day the combined machines came on the grounds and drew lots as follows:

- No. 1, Walter A. Wood, Hoosoe Falls, N. Y.
- No. 2, Seymour, Morgan & Allen, Brockport, New York.
- No. 3, D. M. Osborn & Co., (Kirby) Auburn, New York.
- No. 4, Sheldon & Co., (Coyuga Chief) Auburn, New York.
- No. 5, George S. Curtis, (Com.) Chicago, Illinois.
- No. 6, John P. Manny, Rockford Illinois.
- No. 7, H. H. Taylor, Freeport, Illinois.
- No. 8, E. Ball, Canton Ohio.
- No. 9, Cline, Seiboling & Hower, (Excelsior) Doyleston, Ohio.
- No. 10, Geo. Estery, Whitewater, Wisconsin.
- No. 11, Thos. E. Medill, Ottawa, Illinois.
- No. 12, W. A. Woods, (Self-Raker.)
- No. 13, C. H. McCormick, Chicago, Illinois.
- No. 14, G. H. Bugg, Ottawa, Illinois.

Nos. 6 and 7 had not arrived. All of the forenoon was occupied in cutting a double swarth with each machine, and in testing the draft. Nothing was left to do now but to cut the several lots. The machines cut from four feet eight inches to six feet and a half, and the acre lots were less, just two of these swarths of forty rods in length, the lots having been laid off four by forty rods. At about three o'clock P. M., Col. Capron, the superintendent, gave the signal for a start, when—

#### THE RACE

commenced in good earnest. Each one drove to suit himself, and was under no further control than if stopped from any cause, that he could not start again without permission from some member of the board. No. 5 was the first machine out, not having stopped, and cutting the lot in 26½ minutes. No. 14 cut his lot in 25 minutes running time, but occupied some 33 of time. No. 13 cut in 26, occupying in all 34½ minutes. The general average was thirty minutes. In nearly every case, the more haste the worst speed, as the frequent stoppages showed. No. 5 taking a fine average walk on the start, without any disposition to run, met with no mishaps, came out ahead, and done the work in a very superior manner. So much for common sense and careful driving. The wisdom of the Board

now shone out in full splendor, and their owl like modesty was in the ascendant. The owners all ignorant of what tests would be applied, could only guess from the preparation making, and the most stupid could not fail to see that these were for a race, and which, as a matter of course, was accepted, or rather could not be avoided. The result was not a trial of the mowers, but of horse flesh, and in this light, we were pleased at the speed and endurance of the several teams, while the visitors threw up their hats and hurraed, not at the manner in which the work was done, for that as a general thing was a disgrace to the mowers, but at the endurance and speed of these pet nags. A horse race, whether for speed or bottom, is always exciting to a crowd, and this treat so unexpected, not having been put down in the bills, was received with pleasure by most persons in attendance. To those who had come for the purpose of comparing the merits of the several mowers, turned away in disgust.

We had no disposition to look over the work and to compare its quality, one glance being sufficient to show that fringes and breaks marked the surface more or less. It may be charged that all this was the fault of the drivers, and to some extent it was, but the great share of blame must fall where it belongs. Several of the contestants begged for another trial in the same field, which was granted, while most of them done more or less voluntary work, to show that they could do good work.

At the subsequent trial on Saturday, in the worst field of grass we ever saw cut, all acquitted themselves nobly, with the exception of Nos. 10, 11 and 14, which, for some unexplained reason, were not present. To our mind, the machines, as grass cutters, take all things into consideration, were, first, the Cayuga Chief, and second, the combined machine of John P. Manny. The mower made by the same party fell far below the combined machine. There can be no question that a combined machine will answer all purposes of reaper and mower. The Cayuga Chief has an improvement that we esteem very highly in a mower, and that is a false cutter plate, called a ledger plate. This is fitted in a recess of the cutting guard, and can at any time be taken out and its cutting edges ground sharp, when the cutters are in all respects as good as new. All farmers know that when the edges of the guard become slightly rounded that the machine not only runs hard, but does poor work, and is liable to clog. With this ledger plate all

of these difficulties are overcome. The Chief is all iron and steel, yet weighs only 1,100 pounds. The Manny machine is, on the other hand, composed of a wooden frame, is but little if any lighter, but can be made much cheaper. How far the element of cheapness by the use of wood can be profitable we do not at this time propose to discuss. Nos. 1 and 2 pleased us highly as grass cutters, falling but little behind the two named, cutting wide swaths with comparative ease. No. 5, the combined machine is a noisy affair, but it runs apparently easy and did excellent work. This kind of gearing will need further trial before it can confidently be recommended, though thus far it gives promise of success. In this kind of power with a rapid motion there is usually a large strain on the gearing, which is not the case in a slow motion. Should it succeed it will simplify and cheapen the reaper gearing to a large extent. No. 14 is a square draft machine, well known in this State; it runs easy and does good work, yet it has not become popular, probably from the fact that few people like to manage it. For heading timothy for seed and then cutting the bottom it is very valuable. Mr. Rugg claims one advantage over others, and that is a double motion for grass over that for grain. It is well known that to cut grass the motion must be very rapid, while for grain a slower motion is equally valuable, and thus saving the wear of the machine. There is no doubt much truth in this and the cost is so trifling that we are surprised that it has not been used before, Mr. Rugg, so far as we know, being the only one adopting it.

#### THIRD DAY—REAPING.

The reaping was done in a field of some 200 acres of spring wheat that would turn twelve to fifteen bushels per acre. The most of it stood well, with a smooth bottom and slightly rolling surface. It was not such a field as would very severely test the machines, yet one very well calculated to make a fair comparison, and probably as good as could be obtained under ordinary circumstance. Here as in the case of the meadows the divisions of lands were most excellent, and the President, Mr. Van Epps is entitled to no small amount of credit for the manner in which he managed this part of the field operations. Had the same system been carried out in the examinations we should have felt proud of the State Board. The lots in this case contained 1 84-100ths of an acre, and were drawn as follows:

## COMBINED MACHINES.

- No. 1, Walter A. Wood, self-raker.  
 No. 2, D. M. Osborn, Kirby's hand raker:  
 No. 3, Seymour, Morgan & Allen, self-raker.  
 No. 4, Cline, Seiberling & Howes, Excelsior self-raker.  
 No. 5, W. A. Wood, hand-raker.  
 No. 6, T. H. Medill, Cogswell's patent hand-raker.  
 No. 7, John P. Manny, hand-raker.  
 No. 8, C. H. McCormick, hand-raker.  
 No. 9, E. Ball, hand-raker.  
 No. 10, G. H. Curtis, (cam.) hand-raker.  
 No. 11, H. H. Taylor, Buckeye hand-raker.  
 No. 12, Geo. Esterly, hand-raker.  
 No. 13, S. H. Rugg, hand Raker.  
 No. 14, Sheldon & Co., Cayuga Chief, hand-raker.

## THE WORK.

No. 1 drew the worst lot in the field, being badly lodged, yet the work was as well done as it would appear possible to do it. Of this self-raker we shall speak in another connection.

No. 2 contained a part of the lodged grain; it was very well cut, and with few exceptions well laid.

No. 3. This machine had mostly standing grain, and done its work in most admirable order. The stubble was left clean and the bundles laid square, though spread out nearly the width of the cut, the rake taking it from the cutter, and in a graceful sweep placing it beside the reaper and outside of its track; could the guards be slightly compressed, it would be all that could be desired. The machine is strong and durable, and being the oldest successful self-raker has become justly popular at the west. Taking in connection its good qualities as a mower, there is no wonder that the farmers present purchased several of them of the agent during the trial.

No. 4. The Excelsior is a novelty in its way; cuts good and lays the grain very square, but unfortunately in the track of the reaper, thus compelling the binders to keep up. This, in green oats, damp grain, or when binders are not at hand, is a serious drawback; otherwise the machine is valuable. The platform is composed of a series of slats, and when a bundle is ready the driver by touching a pedal, down it goes, and the stubble passing up through the slats draws off the bundle in most admirable order, though of the full width of the cut. While the

platform is down, a light fender holds the grain from falling. It was much admired, notwithstanding the drawbacks mentioned.

No. 5 was well cut, but the team was driven too fast and the raking was badly done.

No. 6 would have been a credit to its maker a dozen years since, but lacks too many modern improvements to attract attention. All pronounce it a perfect horse killer.

No. 7, John P. Manny. The cut of this machine was six feet, and it cut the lot in thirty-nine minutes, doing it in good order. On this machine, the driver can do his own raking. This was not done on the lot above, but was on the piece attached to it as an independent reaper. How far this can be done day after day in the harvest field, we have no means of knowing, but from the easy manner of raking off the width of cut, which allows of a slower motion forward, with a steady team, we can see no reason why it cannot be done. The machine runs easy, considering the width of cut, and as a hand reaper, must stand at least second in the list. Mr. Manny is a brother of the lamented J. H. Manny whose world wide fame will go down to the latest posterity.

No. 8 came next, drawn by two horses, but evidently a heavy draft for them; it cut six feet. The self-raker is attached to the reel and revolves with it. The size of the bundles are therefore dependent on the grain, as a bundle is made at every revolution of this reel. It has a decided awkward look, yet the grain was very well laid, similar to that of No. 3, in fact, it has the same delivery, McCormick using the Seymour & Morgan platform or circular shield board. The time employed was forty-three minutes. In this machine the serratures of the sickle are larger than usual, and the angle of the section quite obtuse. In this respect, McCormick has made little if any change in the last ten years, nor does he use a smooth edge for grass, but adheres to the sickle edge. The machine is made unusually strong and durable, and probably no machine is so well qualified to stand the abuse of rough work and exposure, as this. Farmers care less about the draft than for strength and durability; an extra horse being of little account to them at that season, when they have little other team work to do.

No. 9, E. Ball, Ohio Mower. This machine cut its lot on forty-four minutes. The cutting bar was set too high, and the machine passed

over the lodged grain, considerable of which fell to its lot. The raking off was badly done.

No. 10. This machine cut also in forty-four, both the cutting and raking badly done, probably set too high for the lodged grain. The raker was not used to the platform, which he said was too long to deliver to advantage. In the standing grain the cutting was good.

No. 11. The same time with the two previous machines; very good work, and a very excellent machine.

No. 12. Time thirty-eight minutes; cut 5½ feet—good cutting but bad raking off.

No. 13. Cut 6½ feet; cutting good but bundles left in a circle and in bad shape for binding; fault, fast driving, the team used being very spirited.

No. 14. Time sixty-four minutes, but cutting and raking of the highest order, in all respects the best laid bundles on the field. The platform of this machine is one of the cosiest and best of the hand raking reapers. This machine is all iron and steel, is compact and strong. Taking it all in all, it is one of, if not the very best hand raking reaper on the ground. Its strength, adjustability, ease of draft, and above all, durability, places it high in the rank of reapers, while as a mower, it is unexcelled.

#### REAPERS NOT COMBINED.

It is scarcely worth while to make a reaper without a grass cutting arrangement, or a grass cutter alone, as it is so seldom that they are needed. W. A. Wood had on the ground a one-horse mower, a well made, pretty machine, and which did good work, but its cost is but little less than a two horse machine, and as our farmers have plenty of team, it is hardly worth while to loose time with this. At the east where oxen are largely used in farming, and but one horse kept for odd work, this machine is all very well, but for the west, of no particular value. The same may be said of these reapers. The one combined machine can do the work of both. It is probable that a double gearing, like that of Rugg's, would be valuable, and would add but little to the cost. The entries in this class were well displayed.

#### INDEPENDENT REAPERS.

No. 1, D. M. Osborn & Co., Kirby hand-raker.

No. 2, Cline, Seiberling & Hower, “

No. 3, Seymour, Morgan & Allen, “

No. 4, W. A. Wood, “

No. 5, C. H. McCormick, “

Ny. 6, H. H. Taylor, (Buckeye) hand-raker.

By the number of entries of self-rakers, it will be seen that they are slowly yet surely working their way to favor, and on this occasion they attracted no inconsiderable attention, so much so, that before the trial was through, to save what little credit the Board had remaining with the spectators, or rather a stampede to the grounds, they were graciously permitted to come into the stubble and look on, and closely watch the progress of the work. Though full half of the visitors had left for home, feeling as though this was no place for them; they had spent their time and money to see a reaper and mower trial, and to be treated with that respect which was due them, but this reticent Board decided otherwise, snubbed them in every possible manner, and add to this, there was no accommodation for them at the hotels, these being full, and the citizens only intent on taking the quarters and half dollars for passage to and from the grounds. Hundreds of these farmers slept on the hotel floors and roughed it as they could. No wonder then their these numbers grew daily less, and at the last day, almost wholly ceased to form a part of the programme. We have already described the action of these machines as combined reapers, and shall therefore pass on to—

#### THE HEADERS.

No. 1, Barber, Hawley & Co., (Haines) Pekin, Illinois.

No. 2, J. C. & C. N. Mabury, White Rock, Ill.

No. 3, G. H. Rugg, Ottawa, Ill.

These were put to work in the afternoon of the fourth day, and to our surprise attracted very little attention. They require seven men and four span of horses, two span to run the header and two span on waggons to take care of the cut grain. This is left sixteen to twenty inches long; about twenty acres is cut in a day. Except on very large farms, the outlay of capital is too large to ever make these headers popular. The evidence in regard to their value is very conflicting. The Haines header did very excellent work, though occupying a much longer time than that of the Maybury. The grain is taken up very clean when it stands up well, but in lodged grain we observed a large loss. The loaders on No. 2 wasted the grain by careless handling, the machine doing good work. The Rugg machine commenced work near the close



of the day, and we did not examine the work, but learn that it was similar to the others, though cutting a much narrower swarth. Throughout the day, the great center of attraction was—

#### BURSON'S GRAIN BINDER.

This was attached to a six foot J. H. Manny machine, made by Messrs. Emerson & Co., Rockford. The inventor, W. W. Burson, of Muscatine, Iowa, and his brother, had it in charge. We believe that all present pronounced it a success, doing the work rapidly, cheaply, and effectively in the most workmanlike manner. From what we have seen of several binders during the past three or four years, we had little faith in them, but this point we now most cheerfully yield on the present occasion. Those that we had seen, either lacked capacity or efficiency, but this is now so perfected that it is capable of binding at least twelve acres a day of ten hours. To do this, one man to tend the machine, one to drive, and one to rake off, with two to set up in shocks, will do the work. Thus, four men will harvest twelve acres with the use of this binder, with an additional cost of some fifteen cents an acre, making a saving of cost equal to three hands. Thus—

Two teams and a driver one day.....	\$ 3 00
Four hands.....	6 00
Wire.....	1 50
	<hr/>
	\$10 50

#### OLD WAY.

Two teams and a driver one day.....	\$ 2 00
Eight hands.....	12 00
	<hr/>
	\$15 00

Making a saving of \$4 50 per day. Add to this the waste of grain, is much less, the saving of which will more than pay for the wire. We would put the saving by the use of this binder in average grain, at not less than fifty cents an acre, with labor and board at one dollar and fifty cents a day. In this connection we have a word to say in regard to Wood's self-raker:

This rake is attached to an endless chain that runs in a groove in the platform, and in passing around, presses the bundle against the shield board and compresses it together, nearly in the manner that is done by the ingenious fork used by Mr. Burson. We see no reason why this self-raker cannot do the work for this binder, and thus save the rake and lessening the cost of the work another dollar and a half a day. The self-

raker can be attached to any reaper now in use, except the Excelsior, which has no platform, and the same may be said of the binder; the platforms can all be so changed that the binder can be attached; but the platform of the J. H. Manny is already precisely fitted for it.

We cannot but believe that this binder will have the effect to materially change the aspect of the harvest field. With its use, a farmer having a hundred acres of wheat, can put it in shock in from eight to ten days, and that with the aid of one man to drive, one to bind, and two to shock up, this will save the labor and board of several hands.

#### THE J. H. MANNY REAPER.

The manufacturers of this valuable machine, Messrs. Emerson & Co., have made it a rule for several years, to donate to the State Agricultural Society a machine to be awarded to the best forty acres of wheat, and they did not therefore feel at liberty to enter the present contest, but it was gratifying to its friends to see it bear to the field the last great improvement that is designed to rob the harvest field of much of its hand labor, and all that it needs for its crowning glory is Wood's rake, and Sheldon's ledger plate for the guard.

#### WHO FOOTED THE BILLS?

To enable the society to make a thorough test of the machines, the cost of which should in part come out of the parties directly interested, the Board collected the following sums of the exhibitors, to wit:

	Am't Rec'd.	Prem.
6 Reapers.....	\$300	\$50 00
14 " and mowers combined.....	525	75 00
14 Mowers, two hours.....	350	50 00
1 " one ".....	10 no competition.	
3 Heading Machines.....	150	50 00
1 Grain Binder.....	Medal.	
	<hr/>	
	\$1185	\$225 00

An excess of entree fees over premium of \$9 60. The expenses of the trial cannot well exceed \$1 60, leaving to go into the coffers of the State Society \$800, a very pretty sum to be taken from the manufacturers on the plea that a thorough trial should be had, instead of which the Board act as committee, with dynamometer tape line and watch in hand, with which to measure the relative value of the several forms of harvesting machines, and the material of which they are constructed. Whatever may be

their decision, it will carry but little weight with it, or have little influence in determining inventors and manufacturers what particular material or form will be used; and the question of hand-rakes, of self-rakers, and of headers, is yet at loose ends; but the people will soon settle the question of the binder, by giving it a proud position and crowning it with the wreath of merit.

#### PERSONAL.

The important part of our task is done, and we turn with pleasure to return our thanks to Dr. Reynolds of Dixon, whose latch string was out; to President Van Epps, for many kind attentions during the last two days of the exhibition, and to mine host of the Nocosha, whose kind sympathies revolted against indulging editors the pleasure of sleeping on the floor for more than one night. Notwithstanding the large crowd at this house, the meals were in season and abundant. We regretted exceedingly that our time did not permit us to accept the kind invitation of our friend, J. T. Little, whose beautiful grounds have added so much to the value of Dixon. Of Dixon itself we have no very exalted opinion as a suitable place to have a reaper or any similar trial, yet it lies in beauty on the slopes that make the banks of the Rock river so desirable as a residence, and as associating with it much of the history of the early settlement of the county. We have never spent a week at any gathering of the kind that drew more largely upon our energies than this, and glad were we to see the sun go down on the last day of the week.

FLUSHING, NEW YORK,  
August 21, 1862. }

*Editor Illinois Farmer, Champaign Illinois:*

SIR:—Although the ILLINOIS FARMER is published at Springfield, yet I suppose it is the most direct course to direct to you at Champaign. I sent you Strawberry Sheet, 47th edition last spring. I have recently perused some notices about Mr. Davis' and Mr. Sim's strawberry plant in your State. I wish you would give me a list of the strawberry growers of your State, and the number of acres each cultivates, as I am preparing the statistics of the strawberry culture of all the States. Also, I would like a list of the amateurs of the strawberry, so that I may mail our new 48th edition of the Strawberry Catalogue, now in press, to them all. The Patent Office Report forthcoming, will have descriptions of all our varieties, except twelve new seedlings named and described last June. I suppose you perused my article in the Jan

uary number of the Horticulturist, (twelve pages.) I should like much to receive the Transactions of the Illinois State Agricultural Society. To whom must I apply to obtain it? I notice that the most of the varieties that Knox praised at the meeting of the Fruit Growers of western New York, are mere trash. He pronounces positive opinions on the shortest culture, and therefore commits a mass of blunders. See his statement that the "same strawberry plants may be cultivated ten years," when the plants usually die the third year. He has extolled British Queen as suitable for field culture, when you cannot get a quart from twenty feet square. I now find it is Kivers Eliza he has been selling for British Queen—a good variety as to quality of fruit, but will not yield twenty-five bushels to an acre. Triumpe de Grand will yield about one-third of a crop, say sixty to seventy bushels to an acre. I see that G. B. Davis, of Chicago has Knox's British Queen, which is River's Eliza, also Longworth Prolific and Hooker, both of which only yield one half, a fair crop, such as any really productive variety yields. Willson's Albany produces two thirds of such a crop as Diadem, Globose, Scarlet, Suprema, Weleone, etc. produced. The Welcome and Bayne's Favorite Scarlet, are the most important early berries to begin the season; the former is twice the size of the Early Scarlet and Jenny Lind, and far superior in quality. The varieties to follow next are Crimson Eclipse and Sultana, both beautiful berries; and next the Victorine, Suprema, and Truimvirate; then comes Diadem, Semprema and Trevirana. These are succeeded by the Scarlet, Magnste and Ophelia, the two heaviest, and foremost and most showy of all the American varieties suitable for market and long carriage. Areadne and Prince's Large Globose will come in at the last of the Scarlets. After these, the late Pine varieties, to which family the Triumph de Grand belongs. This ripens its latest berries after the Scarlet and Iowa varieties are past. It is, however, so far surpassed in sweetness, flavor and perfume by other Pine varieties, that it will receive no encomiums after its growers shall have cultivated the most estimable Pine varietice, such as La Constante, Lucas, Oscar, Margueritte, White Pineapple, Auguste Piedmyer, Compete de Beaumont, Duke of Cambridge, Jucunda, Lorio, Royal Victoria, Delices du Palais, etc.

Such amateurs as are desirous to continue the chain, can have a September crop from the Belle Bordelaise and Prolific Hantbois, if they will

give attention to their irrigation. And besides these, the Alpine varieties will furnish their fruits from the closing of the Pines until their growth is arrested by the freezing of the ground.

Yours, very truly,

WM. R. PRINCE.

— For Transactions of Illinois State Agricultural Society, apply to J. P. Reynolds, Secretary, at Springfield, Ills.

Cannot give the list of strawberry cultivators, but hope to soon. Most of those at South Pass, (Cobden Station) will be found in the April number of the FARMER. Mr. P. is a little sharp on the Rev. Mr. Knox. We have no doubt Mr. K. has put his foot in it to some extent. Go ahead gents, the strawberry is bound to win, but we shall watch you all sharps, that is all of you who have new sorts to sell us. We will soon have to dub, the strawberry the Queen of summer fruits—cheaper than potatoes and about the same size, if we take into account the new sorts that are soon to be produced. We are out with the "big" strawberry for home use, but they will do for market for sometime yet. We have no doubt that many of the new sorts of Mr. P. will prove valuable, and hope they will have a fair trial by our growers. His climax we fruited the past season and are pleased with it.

### Side Shows at the Reaper Trial.

The Board had advertised for all kinds of implements to be present at Dixon, but the show was not large, in fact it was but a poor place aside from the specialty, as the result proved, and we think the manufacturers made nearly a dead failure of it.

H. A. Pitts & Co., Chicago, had one of their superb threshing machines; P. B. Hubbard, of Sterling, had one made in Ohio; James Vaughn, of Magnolia, and M. L. Gillman, of Ottawa, power corn shellers. P. W. Gates, of Chicago, a sorghum pan and crushers. Messrs. Clark & Alter, of Rockford, Mr. Cory, of Lima, Ind., Mr. McFarlane, of Ottawa, all had sorghum pans.

T. A. Galt, Sterling, grain and seed sower and a band cutter. This last is to be attached to the feed apron of any threshing machine, and will cut the bands as the bundles enter the cylinder, thus saving considerable labor. Mr. Spafford, of Decatur, had a fine well made sulky two-horse corn cultivator, doubtless a valuable implement. To this, we add churns, washing machines, clothes wringers, knitting machines,

spading machine of Comstock & Glidden, should have been tried but was not, and an automatic scale to weigh grain from the threshing machine or warehouse, an ingenious and valuable invention.

**THE FLOWER GARDEN.**—When white lillies, or any other spring flowered bulbous plants have done flowering, and the stems died away, they should be taken up and re-set; the disease in lillies often met with is probably caused by their being too long in one place.

Most of what is to be done now in this department consists of the routine duties of neatness, tying up, pegging down, removing faded blossoms, collecting and destroying insects, etc. Many suffer their flowers to produce seed, but this injures the flowering. If it be particularly desirable to save seed of some things, allow only just as much to ripen as will be needed. In some cases, cutting off the flowers as fast as they fade, doubtless the season of flowers.


Auriculas, Polyanthus, Pansies, Daisies; and other of these flowering, half hardy plants, commence their root growth about the end of this month, when the time has arrived for re-planting. Good, fresh, and yet half decayed; and from a pasture field, is the best to grow them in. Those who have the advantage of pots and frames cannot re-pot at this season.—*Gardener's Monthly*.

**STAMPING FRUITS.**—A German journal publishes the following:

"At Vienna, for some time past, fruit dealers, have sold peaches, pears, apples, apricots, etc., ornamented with armorial bearings, designs, initials and names. The impressions of these things are effected in a very simple manner. A fine fruit is selected at the moment it is beginning to ripen—that is, to take a red color—and paper, in which the designs are neatly cut, is affixed. After a while the envelope is removed and the part of the fruit which has been covered is brilliantly white. By this invention the producers may realize large sums.

**ELDER BUSHES VS. CURCULIO.**—A man in Michigan reports that for three years he has kept the curculio from his plums, and raised good crops by tying elder bushes to branches of the trees. It had to be done every few days, from the setting of the fruit until full grown.

**THE CURL OF THE PEACH LEAF.**—The Ohio Farmer says the remedy for the blistering of the peach leaf is to sprinkle the trees, just before opening of the flower buds, with a mixture compounded of equal parts of lime, flour of sulphur, and soot, dissolved in water.

 The British naval forces on the North American and West India Stations now number thirty-three vessels carrying 821 guns.

## Culture of Bees — Ventilate Your Hives.

A cheap, but tasty bee house, or a hive set here and there among the shrubbery about the house, has a wonderful home-like and interesting appearance. The curious habits of the bee, and the lusciousness of its products, have a charm for children which they never forget, if they have once visited the farm and enjoyed them.

A swarm soon becomes acquainted with those who have the care of them, and will cover the flowers of the garden or the farm in search of honey, and scarcely ever molest any one who is careful not to injure them. In picking raspberries and strawberries, it is rarely the case that any one is stung, though hundreds of bees may be visiting the blossoms for their rich treasures, at the same time.

We visited a bee master recently, who informed us that he took one hundred pounds of honey from a single swarm, last fall. This swarm wintered well, while several others standing near, were utterly ruined by mice.

The greatest drawback, however, in bee keeping, is the destruction occasioned by the accumulation of their own breath and the exhalations of their bodies. These are much greater than any suppose, so that the stronger and more numerous the swarm is, the more danger there is to them from their own vapor. It is quite common to hear bee keepers say, they have lost their strongest and best swarm, and the loss arises from the cause we have just stated, or, in other words, from the *want of proper ventilation*. Three-fourths of all the swarms lost, die from this cause.—*New England Farmer*.

**THE EVER-BLOOMING ROSE.**—If there is a plant in whose culture we excel the people of all other nations, it is the "ever blooming rose;" if there is one plant that gives more gratification and pleasure than others for the care bestowed upon it and the price of its cost, it is the ever-blooming rose; if anybody grows but one plant, it should be an ever-blooming rose. It will thrive as well in a common flower-pot in the window of the poor as in the richest vase of the conservatory of the wealthy; and with the same soil and with the same toil and care, it flourishes as well at the side of the humble cot as at the ingenious veranda of the palace. When there were none but the yearly flowering rose, it was praised, worshipped, adored; orators lectured upon its virtues; scribes wrote of it, and poets sung of it; it was strewed on the paths of the great and meritorious as an emblem of adoration; it was wrought into wreaths and garlands to ornament the temples, thrones, and persons of kings; it garnished the bride and holy altar where the ceremony of marriage was performed; it decked the festal boards on great occasions, and embalmed the remains of the dead; it was planted upon the graves of the worthy to record the virtues of the departed. When so much adulation and honor were bestowed upon the rose that flowered but one month in the year, what language is sufficient to chant the praise

of one that now far surpasses it in beauty and fragrance, and gives us a continual feast of its gorgeous bloom and sweet perfume.

So various are the habits, colors, and sizes of the ever-blooming rose, that it can make a diversified garden of itself, an ornamental hedge for enclosure, garnish and beautify the walls of unsightly buildings, grow as dwarf bedding plants, and as stately shrubs; clothe trellis work for ornament, and arbors where we may rest and repose under its grateful shade and shelter, and feast upon its matchless beauty and fragrance.

## Summer Chickens.

Those who bring out chickens in April, or earlier, do it at the risk of making considerable loss, as that month is usually a cold, wet and windy one. When successful, however, they bring a high price, sometimes when marketed in July, as high as fifty cents per pound. This has prompted many to get broods as early as the last of March, and the first of April.—*Farmer and Gardener*.

We copy the following from the London Cottage Gardener, and think it worthy of attention by those who do not care to send chickens to market, but only to provide themselves with an annual stock.

There is an old proverb in some parts of the country, that summer chickens never thrive. It runs thus, in parts of Hampshire:

"Chicks that are hatched when there's making of hay,  
Will never grow up, but pine away."

All those who wish to rear poultry without much trouble, choose the month of May, for doing so. Sometimes a hen deserts a few days before hatching; sometimes she dies upon it. If we listen to the above tradition, there is no remedy. But we believe there is, and a simple one; set more eggs, and be not deterred by fables. We go on hatching till August, and we are successful. The London market is only supplied by this process, with the poultry for which it is justly celebrated. Fowls of the same age can be had all the year round, because the work of hatching never ceases. If we were to tell such of our readers, as require instruction on the subject, that any expensive or very troublesome process was necessary, they might, perhaps, say, that of two troubles, they thought waiting was the less. But it is not so; and we confess, it seems to us that the idea can only be supported by that undeniable argument, "I do not know how it is, but I know it is so."

Another large class of poultry breeders say they do not believe in the saying; but June is too late for chickens. Well, if you say it is too late, we say—prove it. The nights are shorter in June than in May; the weather is warmer. Near to the winter you may say; but you have four months to the end of October, all good growing, genial weather, and at that age, your chickens will stand anything. They are three weeks or a month later, that is all. It may be

said, there must be some foundation for the proverb; the sun is too hot and scorching, and if chickens are entirely exposed to it, they will die. Put the coop, with the hen into it. In a shady place, but near the sun. As in April, you gladly turn it to the sun, wherever you can find it, so in June turn it away. Let it be near covert for the chickens, shrubs, artichokes, pears, anything that produces shade and harbors insects. You will find your chickens live there a great part of the day, and always when the sun is most powerful. They find there the insects that have deserted the parched grass. Let them be well and frequently supplied with fresh and cool water. If you can do it, or have it done, you will find a great advantage in having a few pails of water scattered every evening on the ground, they use in the day. It freshens it and keeps it cool. To sum up, give your chickens shade, clean and cool water, with a run affording them covert; and we promise you, you shall say and prove that the prejudice against June chickens is a popular error.

### Leaf-Curling Caterpillars.

The curling of the leaves of the shrubbery and some of the trees in our gardens, is quite annoying to many people at this time, and the question is often asked what can be done? This is one of the minor evils, and seldom requires personal attention except in gardens where the birds have no chance. The expanding buds of your grape vines are often knotted and tied together so that the leaves come out irregularly. Open one of these and you will find it has been fastened together by minute silken cords, finer than the threads in the web of a spider—examine closely and you will see a light-colored little caterpillar, less than half an inch in length. It ties these growing leaves together so that they shall not spread out naturally, and this forms a place of concealment from many of her enemies where she feeds in fancied security.

The leaves on your rose and currant bushes are sometimes very much deformed—the sides folded together or formed into rolls—open these and you find a dark-colored worm, with a black head—this is a lively squirming little fellow, that will probably spin a thread and let itself down some distance, and be concealed amongst the leaves below. A similar little worm will be found upon some pear and plum trees, sometimes so numerous as to deform the foliage and even to injure the fruit. The canker worm, sometimes in such vast numbers in the apple orchard, has been a serious injury. This last appears irregularly like the plagues of old, beyond human control.

If you have induced the wrens to take up their abode in your garden, by preparing cozy little places for them to build their nests in, they will soon clear your shrubbery of these leaf-curling caterpillars. If you are in the neighborhood of some of the large trees of the city, and especially the grand old elms, where the Baltimore Orioles make their nests, your fruit trees will suffer but little from this class of insects,

but if you cannot have the assistance of the birds, the best plan to subdue these pests, is to crush them between the thumb and finger as fast as the expanding buds or leaves show signs of their presence. The washes and powders recommended are very troublesome, and very few, if any, are effectual.—*Newark Mercury*.

### A Successful Ice House.

C. B. of Chester, Pennsylvania, communicates the following to the Gardeners' Monthly:

Ten years since I built an ice house. After inquiry and reflection, I adopted the following details of construction, which has proved a complete success, the supply rarely failing until ice forms again.

I chose as a location, a north-lying bank of sandy formation, made the excavation a cube of thirteen feet, or so that the earth removed would bank up that height, put in an eighteen inch dry wall, except the top foot, which was mortared inserted on each side three pieces of three by four inch scantling, to which perpendicular one inch pine boards were nailed as lining; put on a light shingle roof of double pitch; let the spaces at the eaves between the rafters open for a draft of air to enter, and placed a small Venetian window near the top of the north gable for its escape. Before putting on the shingles, and after nailing lath on the underside of the rafters, the intervening space was tightly packed with straight straw; the roof is kept whitewashed. The south gable consists of two doors, one of which answers for general use, but when filling, the ground being level on that side, both are opened, a small platform placed in front of them, and the ice is shot directly in from the cart. The bottom was made about one foot deeper in the middle than at the sides, and eight to ten inch chestnut logs laid across it close together; the ice is thrown on these.

I fill only to the squire with ice, and the remaining space with wheat straw, which I am careful always to keep covered over the ice and packed down the sides a foot or two as it melts, leaving a space of about one foot between the ice and the lining. The bank was well sodded up to the wall, so as to throw off rain water falling on the roof and prevent its ingress to the house. Free daily use is made of the ice during all the warm season, for a family of nine, and there is usually about a load or two over. The capacity of the house is about twenty well filled ox-cart loads; with side boards. Almost any farmer can erect such an ice house at but little expense.

Most of us spend so much time in learning the opinions of others, that we have no leisure to form any of our own.

The devil and the rebel confederacy are the rival fathers of lies, and the latter has much the larger family.



**HINTS ON MANURE.**—The following hints on the treatment of manure, from the Massachusetts Ploughman, should be observed by every farmer. Manure should not be permitted to lie uncovered any length of time after being spread upon the ground. Exposure to a hot sun or a dry wind for a few hours dissipates a large share of its virtue.

“Manures for corn must work early in order to hasten the ripening of the ears. But in order to do this, they should not be buried deep, for deep burying keeps them cold too long and not active enough for corn.

Many writers have asserted that there is no risk in burying manures deep in the soil. They talk quite learnedly of the loss of ammonia when manures lie near enough to the surface to breathe a little. But manures must have some air to give them action. When cattle are permitted to beat down a heap of manure in the yard so that it cannot have air, it ceases to ferment, and will lie quite safe in the yard through the summer.

Manures may be permitted to ferment moderately, in heaps thrown up lightly, before they are spread over the field. Then a harrow will bury them deep enough in case they are spread over fresh furrows. They will produce better corn than they will when buried quite deep. Yet writers, who are not practical farmers, are generally slow in learning this.”

— About half right, Mr. *Ploughman*. When manures are plowed in the advice is good, but under all circumstances, we prefer them used as a top dressing for meadows, corn fields, potatoes, etc. ED.

**VALUE OF HAY COMPARED WITH OTHER MILK-PRODUCING SUBSTANCES.**—Several French and German chemists estimate the relative value of several kinds of food for milch cows, according to the following table:

That 100 pounds of good hay are worth 200 pounds of potatoes; 460 pounds of beet root without the leaves; 250 pounds of carrots; 80 pounds of clover, Spanish trefoil, or vetches; 50 pounds of oil-cake or colza; 260 pounds of pea-straw and vetches; 300 pounds of barley or oat straw; 400 pounds of rye or wheat-straw; 25 pounds of peas, beans or vetch-seed; 50 pounds of oats; and 500 pounds of green trefoil; Spanish trefoil, or vetches.

“Papa,” said a little boy just furnished with a drawing slate and pencil, “please get down on your hands and knees!” “Why so, my son?” “Because I want to draw a donkey!”

It is stated by correspondents at the London exhibition that the United States will carry off more premiums in proportion to the articles exhibited than any other nation.

Intelligence is the primitive source of freedom.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, SEPTEMBER, 1862.

## Editor's Table.

THE seasons have traveled through the frosts of winter, the rains and sunshines of spring, the heats of summer, and now we have the mild days of autumn, crowned with a fair crop of earth's products, but the laborers are few to gather and market them. The last call for troops has drawn from the most industrious classes and we shall seriously feel their absence. And yet another drain is to be made that shall take in its sweep the heads of families and the larger farmers—if drafted, the chance for a substitute will be small indeed. For the past two months we have been short of hands to keep the weeds down in the nursery, but not a hand to be had at any price, and the consequence is that weeds do wonderfully abound. The almost continued rains that have fallen in this part of the State have prevented the working of corn, and but little of it has received more than two plowings, and much of it but one. Yet, where the ground is dry, the crop looks well. On low or flat lands the crop is ruined—this will probably amount to a fourth part of the crop. We know of thousands of acres now in weed fallow that will not be disturbed by the plow this year, and probably more will be added to it next season. We hope the war will close during the winter, but have little faith in such an event.

“WHEN TO DIG DISEASED POTATOES.—We believe there is a great deal of labor worse than lost, in attempting to save diseased potatoes by digging. If a potatoe is affected at all by the

rot, even in the slightest degree, digging, in our opinion, and exposure to air, hastens its decay. We believe with a writer in the Valley Farmer, that 'it is better to leave the potatoes in the ground than to dig them as soon as the vines are dead, as all those affected will rot in the hill instead of the cellar;' and when dug late the rotten ones have pretty much disappeared, whereas if dug early and stowed away, many that appear unaffected will rot, and we cannot always detect the slight signs. The stench also is a great objection—this late digging will obviate."

THE Rockford Register says that during the first two weeks of the present month the unprecedented amount of seven inches of rain has fallen in that section—as much as sometimes falls during a whole season. The rain storm on Sunday last was one of great severity.

THE Farmers' Advocate, Chicago, is hereafter to be published monthly instead of weekly till the close of the war. It is an excellent paper, and we shall be sorry to lose its weekly presence.

Other weekly agricultural papers will probably follow suit. In fact, it is no time for agricultural papers of that class that cater to the family fireside. The blanket weeklies from the city loaded with war news at half their cost, are fast putting them aside. We have had no reason to change our views on this point—an agricultural paper should be what it purports to be and not attempt to fill the place of a newspaper: each man to his trade, say we.

STRAWBERRIES.—Dr. Beckwith of Cobden, had thirty-three square rods of Willson's Albany, and received net proceeds after paying, commission freight and losses, \$110.

The Dr. used seventy-eight quarts for the family. Next month we shall give other figures in this fruit trade.

A NEW USE FOR KEROSENE OIL.—An old and valued friend writing us from the North part of Wisconsin, says: "One of my Concord grapes, set last spring, tried hard to die,—lost its leaves and buds. For two or three weeks I poured kerosene oil on the stem, and in a week, new buds came out, and have made a growth of four feet. I doctored one apple tree in the same way, and it has made healthy growth since."

BUTTERNUT STOCK FOR PEACHES.—The Prairie Farmer states that "an extensive peach grower of St. Joseph, Michigan, lately informed us that he was intending to try butternut stock for peaches quite extensively next year. He is confident of success, claiming that the borer which is now causing much trouble in that section will not harm them. We have known of experiments of this kind but have no report of the success after bearing commenced. What have our Western tree planters to say of the promise of this stock?"

There can be no doubt of the value of the butternut for a stock, especially a stock of boards.

CORN STALKS FOR MULCH.—We have used corn stalks for mulch the present season and find them the best of any substances that we have tried; we shall use them largely on our currant bushes and other plants next season. It will pay to save them for this purpose. It is our intention to cut up several acres of corn with the view of using the stalks for this purpose.

HORTICULTURAL FAIR AT CHICAGO.—No one should forget this fair, it being the first one held by the State Horticultural Society. We shall expect a large show of orchard and garden products, as well as florist flowers and plants.

PREMIUM LISTS OF COUNTY FAIRS.—Many of the County Fairs that have been announced, will not be held. The State Fair is postponed. The last fair appears to have disgusted every one. The place of holding it was distasteful to the citizens of Chicago, but the floods of rain falling at the time, would have made a "big muddy" of any grounds except a sand hill in the State, and of course untenable.

Among the premium lists received since our last issue, is the Lee county, to be held at Dixon from the 6th to the 9th day of October. Lee county always has a good fair. Whitesides county, at Morrisana—\$2 000 in premiums offered. This will also be one of the live shows. St. Clair at Belleville. St. Clair is one of the first counties in the State, having St. Louis for a market. S. B. Chandler, formerly connected with the State Society, is Corresponding Secretary, one of the ablest men in our State in the management of an institution of this kind.

The fair will be held Oct. 7th to the 10th. If possible we shall be present.

## NORTH-WESTERN FRUIT GROWERS COMPANION.

—We are in receipt of No. 1 of this new work, hailing from Keokuk, Iowa, Thomas Gregg, editor and publisher—monthly, \$1 per year. It is very nicely gotten up, and gives promise of usefulness, we hope it may have a long life, but it has a hard time to get a foothold. If it can struggle through the war, it will do well. Such a work is needed and should be well patronized.

We copy the following on orchard planting:

“On inquiring what sorts had done best, we received for answer—naming them in the following order:—“Winesaps, Janets, Yellow Bell-flowers, Oritleys, Wines, Rambes, Fulton Strawberries, Early Harvests and Junes.” “But” the Doctor added, with an emphatic earnestness, “Had I planted only *Winesaps*, I might have been a rich man now.” On another occasion he expressed the opinion, that had his planting been confined to *Winesaps* alone, he might have by this time realized fifty thousand dollars from his orchard. Its hardness as a tree, its excellent bearing qualities, and its good character as a market fruit, render it far superior with him to all others, as an apple to make money on. Such is Dr. Griswold's opinion of the *Winesap*. It may be added here, that he is now cultivating a large lot of yearling seedlings, which he will bud entirely to this variety for future planting.

There are other varieties of which Dr. G. speaks very highly; as, for instance, the Red June—a good bearer and profitable apple; the Fulton Strawberry—a very fine apple; the Fall Wine and the Janet. Among the most highly prized of the apples in his orchard, for quality alone—not being so productive as others—are mentioned the Pryor's Red, the Porter and the Spitzenburgs.

PEACHES IN EGYPT.—The Bro. Evans, at Cobden, have sold 8,000 baskets of peaches from July 15th to Aug. 26th, and have some 500 more to ship. These have sold at an average of two dollars in Chicago, the expense of commission and freight is about fifty cents a box, leaving the neat little sum of \$12 000. They purchased this farm last winter of Col. Barnbridge for \$10 000. Aug. 10th they shipped 100 pounds of grapes at 25c. a pound. The rot will destroy two-thirds of their crop of grapes. June 17th they shipped Keswick Codlin apples, that sold at \$2 25 a basket in Chicago. Aug. 3rd, shipped sweet potatoes which sold at \$2 25 a basket. Who will say that the fruit lands of Egypt will not pay?

IS THE PIG A GRAZIER?—In replying to this query, the Maine Farmer remarks “that if there is any one animal that is omnivorous,—that is, one that will live upon everything and anything—fish, flesh, grain, or grass,—it is the pig. He is carnivorous, granivorous, and graminivorous. We know that he will live, grow and thrive in a butcher's yard, where he can get nothing but flesh and blood. And to the question whether he is a grazier, we can answer yes. We have known the hog to live the year round and keep in pretty good order on grass in summer and clover hay in winter. The farmers in the Madawasha district, also in other sections of this State, and indeed throughout the Western and Southern States, turn their hogs out to “graze” as regularly as they do their cattle. Some of them keep them during the winter all or in part on clover hay. Our neighbor Kezer, of Winthrop, used to feed his store hogs on clover hay, crumbled or pounded fine with a flail, and they thrived well upon it.

A writer in the Country Gentleman last February gave an account of some clover hay fed swine, that were found to be in good condition.” “I have seen,” says he, “twenty-five shoats (September pigs) the present winter, which have been fed on clover hay alone, and they are in good flesh; in fact they are in better condition than the average of pigs wintered without good warm shelter, and fed upon grain. The clover fed these pigs was cut on the 4th of July, and secured without a drop of rain upon it, and of course very nutritious. The pigs, in addition, are supplied with warm, comfortable quarters, and have at all times access to warm spring water.” He also adds: “I once had a neighbor who owned a noted sow, to which he never fed a mouthful of grain during winter, but kept her in a yard with his cattle, and she ate with them the hay and thrived upon it.”

Hogs, however, thrive best on a variety diet, and oftener a supply of good corn meal is found to be the best in this variety, making them very thrifty; but corn is not absolutely necessary to keep them in good store order.

JERUSALEM ARTICHOKE.—Chas. Dement, of Dixon, has a field of eight acres of this vegetable. They are very fine plants and cannot fail of an enormous yield. Mr. D. thinks they will prove profitable for hogs and other stock. The plant appears to delight in our prairie soil, and will doubtless prove profitable. Those wishing to try them, can now get the tubers in any quantity.

BURSONS BINDER.—“Last fall, in my notes from the Iowa State Fair, I gave the favorable testimony of farmers who had used this machine, or seen it operate, and my own favorable impressions of it, from what I was able to see of its operation.

The editor of the ILLINOIS FARMER copied my article, and doubted if the binder would prove practical, because no attempt in that direction had yet proved successful! Inexorable logic! A Chicago echo pronounced the thing foolishness, and proved me a fool [mechanically] because of the cautious commendation I had given it. Other Eastern wiseacres, oracles of rural wisdom, pooh-poohed at the idea of the thing.

With this condition of mind among cotemporary writers, and the humiliating idea of myself which their inflections had given me, what was my gratification to find Burson on the ground, with his binder attachment to a J. H. Manny machine, binding the grain as fast as it was cut, before it left the platform; and to see these same Sucker editors following it with open-mouthed wonder and a grin of gratification, garrulously asserting the triumph of the binder!—as innocently, too, as if they had never given Bragdon a raking down for his presumptuous opinion! But the retribution was a pleasant one no doubt. The saving the wages of four or five hands in the harvest field, and their board and the consequent labor in the household, is no trifling achievement, to say nothing of the saving of grain which results from binding it before it leaves the platform of the reaper. It requires but three men to do the work of cutting and binding the grain—the driver, the raker, and the binder. The grain is handed to the binder by the raker, who uses an ingeniously-made thumb-fork to gather and compress it. The binder shuts the arm of the machine over the bundle, compressing it tightly, gives a crank two or three quick turns, the bundle is bound, tied, a jerk opens the arms, and it is kicked on the ground. All this is done in much less time than I have consumed in writing it. It seemed to be the conviction of all who saw it operate that it was a success; and that the hand-raking machines could only compete with the self-rakers by adopting the binder. The bundles are bound with small wire, and as tightly and well as the average work of any five men that follow a machine in the field. The wire costs from twelve to fifteen cents per acre. Objection was made to these wire bands, because it would require more time to cut them, and then to see that they did not go through the machine with the straw, and wind about the cylinder of the thrasher. I found that a pocket knife would sever the wire band as quickly and easily as if it were straw; and if the wire will affect the work of the thrasher, which I doubt, a little practice will enable the band cutter to retain it with one hand and cut it with the other.”

— The above we cut from the Western Editorial of the Rural New Yorker, and now that Mr. Burson has so far perfected his machine that it has the capacity to bind a six foot swath, we congratulate him on his success.

That the binder will take its place in the harvest field, and do away with hand binding we have no doubt. But this is not the only binder that we are to have, as we learn that others are being perfected that may compete with Burson for the patronage of the Western farmer. That Burson has put the first successful binder in operation, there can be no dispute.

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A HINT TO SUGAR BEET GROWERS.—Editor Chicago Tribune; Will you be kind enough to call the attention of the various parties experimenting with the sugar beet seed, imported by Wm. H. Belcher, Esq., to the necessity of hilling their sugar beets, so as to keep the roots under ground. Only by a strict observation of this, and by keeping the field clean of weeds so as to admit air and sun, they will be successful of producing a good quality of sugar beet. The root has a great tendency to grow out of ground, impoverishing thereby materially. Having observed that many think indifferently about these most essential points, and being very anxious to preserve this fall enough of good sugar beets, to demonstrate on a large scale, that sugar can be made as cheaply in Illinois as in Louisiana, you will not only oblige Mr. Belcher and the subscriber, but also the whole community, by giving this note a place in your columns.

Very truly yours,  
R. W. BENDER,  
Supt. Chicago Sugar Refinery.


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COAL TAR FOR FENCE POSTS.—A correspondent of the “Country Gentleman;” having recommended the mixing of resin with coal tar for fence posts, another correspondent writes on the subject, as follows:

“I believe that the resin is superfluous. Inclosed you will find a chip which was taken from a fence post set five years ago, smeared with coal tar alone. It was taken out three or four inches below the surface, where a post usually commences to decay. The adjoining post, split from the same log, [and I should think the two lay side by side,] set at the same time, but not coal-tared, has decayed so that you can kick into it more than an inch. This, in my estimation, proves the efficiency of coal tar. In applying the tar, I think that the timber should be well seasoned. Heat the tar, letting it boil a few minutes; then apply hot. An old paint brush is the best thing that I have ever used for putting it on. Cover the whole surface of the post that is to remain in the ground, and from eight to ten inches of that above. After it has dried, which is usually in one or two weeks, tar again as before, and as soon as the dry posts are ready to set. If Mr. Rogers will try the experiment, I think that he will find that coal tar alone will be as efficient as though resin were mixed with it.”

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HORSE FAIR, CHICAGO.—Don't forget this fair; it will be the great show of the season.

 The wheat crop of Ohio is one of the largest ever grown in the State. The Cincinnati Gazette of a late date says: "The wheat crop has just been gathered in the Miami country, and for the most part throughout the State. It is the best and largest crop of wheat produced in Ohio since 1850. The crop of that year was the largest ever grown in the State, and the largest average per acre. It is probable that the crop of this year will be equal in amount to that. The crop of 1850 was 21,500,000 bushels. That of this year may safely be put down at 30,000,000."

**UNITED STATES AGRICULTURAL SOCIETY.**—This profound institution seems to be in the last stages of a collapse. It has determined that its next annual exhibition shall consist only of a wine fair—to be held at the city of Washington, on the second Wednesday in January, 1863. Premiums are offered on Catawba, Herbemont, Isabella, Scuppernong, Delaware and California Mission grape vines. In all cases the awards are to be silver or bronze medals. The United States Agricultural Society is great on medals. Why didn't the managers include Lager Beer?

**CATALOGUES RECEIVED.**—Wholesale of E. Moody & Son, Lockport, N. Y., an immense stock of pears and other fruits. W. R. Prince & Co., Flushing, Long Island, New York, several specialties including strawberries, bulbous, flowers, and ornamental trees and plants. N. R. & M. D. Willson, West Bloomfield, N. Y., a general assortment of fruit trees. Messrs. Elwanger & Barry, Rochester, N. Y., an immense stock through the whole range of nursery products.

**IOWA AGRICULTURAL SOCIETY REPORT.**—This report is just at hand. It is highly creditable to the State, as well as the Secretary, Geo. Willson. Last year the Society spent nearly a thousand dollars for seeds, which were distributed throughout the State.

**FIELD NOTES AND THE OHIO FARMER.**—These have now been consolidated, and S. D. Harris is editor.

The Field Notes is discontinued, and the Ohio Farmer published at Cleveland as usual. The Col. has given up going to the war for the present.

**NEW ELEVATORS.**—In addition to the present extensive facilities in Chicago for receiving grain we learn that two first class Elevators are being built on the South Branch by two of our leading warehouse firms, to be completed in a few months and to be furnished throughout with the most approved machinery including twenty-three of Fairbanks' 500 bushel Hopper Scales which is a sufficient guaranty that correct weights will be given. Besides these, the Messrs. Fairbanks have set in this city in a little more than a year, about seventy 500 bushel Hopper scales and a dozen or so smaller ones making over a hundred in all. So perfect is the machinery, that each scale may be loaded and unloaded in ten or twelve minutes which gives some idea of the enormous amount of grain which may be weighed upon them all in a single day. Let the farmers of the Northwest raise their immense crops of grain and the railroads and canal transport it to Chicago; there is no doubt but our means for receiving, storing and shipping it will keep pace with the demand.—*Chicago Evening Journal.*

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### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin now, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

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Every one is aware that the twisting and wringing of clothes by hand, stretches and breaks the fibres; but this machine presses them so even, between two rubber rollers, that a newspaper thoroughly soaked can be wrung without breaking it in the least. Buttons, hooks and eyes, &c., are not injured by it.

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 No. 4—Cut 14 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 5—Cut 16 inches, wrought and cast standard, right and left hand, single and double shin.  
 No. 3—Clipper plow; cut 12 inches, wrought and cast standard, right and left hand, single and double shin.  
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## German Steel Plows.

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 No. 3—Cut 12 inches, right and left hand, single and double shin with wrought and cast standard.  
 No. 4—Cut 14 inches, right and left hand, single and double shin, wrought and cast standard.  
 No. 5—Cut 16 inches, right and left hand, single and double shin, wrought and cast standard.  
 No. 3—Clipper plow, right and left hand, single and double shin, wrought and cast standard.  
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 No. 1—Single and double shovel plow, with or without shield attachment.  
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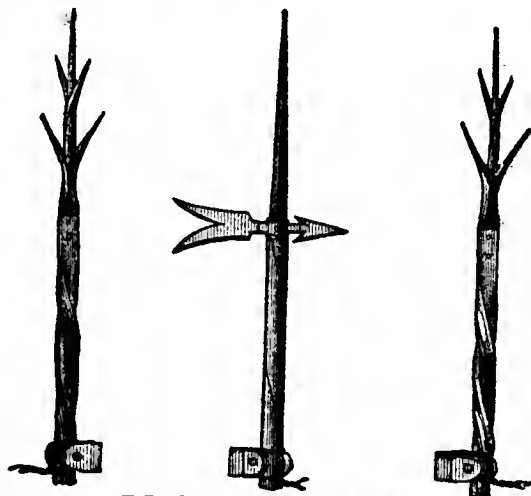
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August, 1862. tf

## PROSPECTUS FOR THE JOURNAL OF THE Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

**AGRICULTURE IN ALL ITS BRANCHES,**  
Mechanics and Natural History, as may require early publication.

*All premiums offered and awards made by the State Society will appear in its columns.*

All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, OCT., 1862.

NO. 13.

## October.

Another month has been added to the list and brought the days of the autumn frosts. All is now activity on the farm; the corn, the potatoes, the winter apples, the fall plowing, and the minor details of the farm must be attended to, so as to be ready for winter. In our wide range of latitude, these things have a varied importance. At the north, it is absolutely necessary that the corn should be housed before December, while in the central part of the State, it is seldom that husking corn commences before that time, and is continued throughout the winter. To some extent, this feature in corn culture, gives to that part of the State the prominence to that crop, which is, and will continue to be the great staple. Potatoes should be harvested when the ground is dry, and soon after they become ripe, which is generally long before frost, and those now out should be attended to at once. Potatoes should be put in close bins in the cellar, or left in the field and covered with earth, not deep at first, but add a covering of straw, stalks, or litter from the stable to keep out the frost so soon as winter sets in. It has been supposed that potatoes left in the hills where they are grown, and protected from the winter frost; that when planted, would be free from the rot; and thousands of dollars have been paid for the right to use the process, or rather the secret, which was sold farmers at five dollars each, and called the Michigan Remedy. Whatever attaches to this remedy, is the exclusion of the tubers from the air. Now this is done as perfectly

as in the hill, with the exception of the few hours at the time of digging. Every farmer's wife knows, that in the spring, potatoes are better that have been kept in pits out of doors, than those in the cellar, owing—doubtless—to the exposure to the air. Dealers know that potatoes kept in barrels, are more fresh and saleable than those kept in a room exposed to a free current of air. These hints are worth remembering if you wish for good potatoes next spring.

That thousands of dollars have been lost in exposing cribs of corn to the rain and sun without covering, the past summer is now apparent. Just look at the market prices for corn, and you find it read: Yellow, thirty-seven cents; mixed, thirty-three cents; rejected, twenty-six cents; condemned, at such prices as can be obtained. Now the rejected and condemned, is the corn damaged in the large cribs, and entails a loss in price at the least, for mixed, of eight cents; of yellow—of eleven, and often fifteen cents, but the average at ten cents on the price, is certainly sufficient to urge the necessity of good cribs. But the loss does not stop here, for we have two other items to be added. One is the loss of more or less of the corn that is absolutely rotten, and must be thrown out at once, and the loss of weight on the remainder, we foot up: first, the rotten corn thrown out at the time of shelling; loss of weight from the effects of the weather, and loss of price. These items added, make too important a catalogue of ills to be passed over in silence. We wish that a law could be passed prohibiting any farmer from putting up corn in rail pens with or without

such covers as is customary. The truth is: no farmer can afford to put his corn in anything but a good, well made crib with water-proof roof. We put up a crib last winter thirty-two by twenty-eight feet. Crib eight feet wide with a waggon house twelve by thirty-two feet in the center, and floor over head for storage, for \$100. The capacity for corn is 2,000 bushels, or a cost of five cents a bushel for one year, and after that, the house is ready and paid for. We have no doubt that the average loss on corn thus exposed the past season, is not less than ten cents on the bushel—a sum double that of the cost of a good crib with waggon shed thrown in.

Now is the time to attend to this matter, before the husking is commenced. It is true the past season has been unusually wet, and of course more destructive to the cribbed corn, but to offset this, much of the corn this season is too late, and will not be well ripened, and if put in the usual sized cribs or rail pens, will most assuredly mold, and become more or less damaged. We hope the last season's experience is sufficient to induce a change for the better. We would prefer half of our corn in a good safe crib, than the whole of it out of doors—better sell half for the lumber, than to risk it out. On the whole, no farmer can afford to do without good corn cribs for his entire crop.

The bean crop will be of value this season, and will pay to look after. We have given ample direction in this regard, in previous numbers of the FARMER. The difference between a *prime* article of beans and those slightly damaged by rains, is rather large and should be avoided.

The profits of farming, to a great extent, depends upon the harvesting of the autumn crops. It is of little use to grow farm products unless we take good care of them. The difference between good and indifferent care, can be counted up in dollars and cents. No month of the year has more active duties

than this, yet it is not a month of severe labor. The weather is generally of the most charming description. The days are short, cool, and invigorating. Add to this the pleasure of seeing, day after day, the storing away of the products that ardent summer has thrown into the lap of autumn, is sufficient to cheer us on, and to induce us to activity and care.

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### At The Old Homestead.

After an absence of four and a half years, we again set at our old desk, in our old home, to write for the press. Here we wrote our first article on farming, and from here we have held converse with the outside world, until we have passed the period when men are drafted for the war. Trees—great trees have grown up around our old home, and the autumn winds come to us through the barrier that forms a living wall around us. During the five summers of our absence, the trees have kept on growing without much regard to the absence of their owner; but the fence, the buildings, and the old smiling aspects of the place, have sadly faded out, and need the hand of the owner spread out toward them. The fruit trees, wrecked during the winter of '54 and '55, have nearly disappeared, while the hardy ones have kept on, adding growth after growth, until they bend beneath the loads of fruit, counting hundreds of bushels that find a ready sale, thus adding value and beauty to the place. The pear trees that nestle under the shelter of the house ground, are loaded with beautiful fruit, while scarcely a stump remains of over two hundred planted in the open orchard—another witness to the long array of the value of shelter.

In the orchard, the Keswick's Codlin holds the first place as a profitable market apple, and so fully are we satisfied of this fact, that we now intend to set a new orchard of one thousand trees of this variety; but our readers must bear in mind that this old


homestead of ours is but sixteen miles from the heart of the city, and these apples are sold for cooking purposes, as they have a reputation above all others for this purpose.

The Holland Pippin is also a favorite market sort; rather late but its large size, fine form, pretty color, and good quality for cooking, will sell it. Its season is close after the Codlin. Two trees of Autumn Swaar have borne well, and command a ready sale.


Among summer apples, we have not found, during the past half a dozen years, the Early Harvest, Red Astrachan, Summer Rose, Early Strawberry, or Benoin. Profitable sorts. Summer Queen always pays, and so does Sops-of-Wine, or as it is better known under the name of Williams' Favorite. Golden Sweet bears sparingly; Sweet Bough is of no value, and Fall Pippin can be classed with it. Our best September sweet apple is Late Golden Sweet, as it is productive, hardy, and fruit of good quality. The next in season to it is Ramdells Sweet and Winter Bough for late winter. Tollman Sweet has never done well—always bears moderately. Snow Apple is the best late fall and early winter. Winter Russet holds a high place, but Stannard is a head and shoulders above all for profit, holding the same place in our esteem among the winter apples, that the Codlin does among those of summer.

A week at the old homestead and we leave it in charge of a junior member of the family to attend the great fair of the State Horticultural Society, and shall then return to the new home that we have carved out of the grand prairie that sweeps down into the center of the State.

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 It is stated that the Rev. Enoch Sanford, of Ranham, Mass., sixty years of age, has enlisted in the army.

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 Six hundred government employees at Watervliet Arsenal have taken the oath of allegiance.

## Late Grafting.

Grafting, it is generally supposed must be done early in spring, or it will not succeed; the rule is to graft before vegetation has begun. We have various times practiced grafting up to the beginning of the second week in June, and with pretty uniform success. The chief difficulty to contend with is to keep the grafts from drying upon the one hand, or to prevent them from growing. Where an ice house is at hand, the difficulty is somewhat under control. Early in the season we received valuable grafts from Mr. Wilder, Dr. Brinckle and others. Our purpose was to set them at once; but absence and other causes made it quite impossible, and they remained in the cellar, covered with sand, till the 28th of May, when they were put in, some of them being quite dry and somewhat shrivelled. They were cut into lengths of three or four inches, and most of them inserted by the common mode of split grafting. With some, however, the usual T cut for budding was made in the bark, the graft cut sloping at the end inserted under the bark, and secured by tying. All were thinly coated with grafting wax. Upwards of fifty grafts, (apples and pears) were put in, and, with one single exception, are growing as finely as could be wished. The exception is a graft of two year old wood, and is breaking rather feebly, which was to be expected. We call attention to this late grafting, not as a remarkable novelty, but that our readers may know that late grafting may be successfully performed. Valuable grafts may some times be thrown away, because it is supposed to be too late to put them in. In regard to the ripening of the wood, we have never had a late graft winter-killed. There is no doubt a limit beyond which we cannot go; but that limit we have not yet ascertained. The grafts put in by the T cut are growing quite as well as those put in the split. The T cut is more rapidly performed, but neither process requires much time.—*Horticulturist*.

—For years we have been in the habit of late grafting, and always with good success. The very early grafting recommended by the books, we always avoid. Never set grafts until the buds begin to swell rapidly, and are near breaking from that time until they are nearly full leaf. Our remarkable success with plum and cherry grafting, we attribute, in part, to this late grafting. It is seldom that we bud anything except peaches, preferring the grafting, as it is found much more convenient with this extended season, to do the work, and we have a better growth:

With the old short season of grafting, of course we could not do so much grafting, and would have to resort to budding.

---

—Why is blanc mange never fit to eat? Because it is generally moulded.

## The Best Region for the Summer Fruits.

The question is often asked, where is the best location to grow summer fruits for the Northern markets, taking Chicago as the great distributing point? For the past ten years we have given this question careful attention, and now believe that we can answer it in a satisfactory manner. Some of the small fruits like the currant, delight in a cool damp climate, while the peach is pleased with a hot sun and a more vigorous range of latitude. What is wanted is not to select one particular place, a township or so, that may become famous for its summer fruits, but a range of country that shall give an abundant supply throughout the entire season.

On no one line of latitude can this be accomplished, for with few exceptions the period of any particular fruit is only about three weeks. In this case there would be breaks in the line of succession, and periods in which the market would be bare. Untoward drouths would often cut off the supply. But this would not be the case when we select a line of longitude, running through a fertile country adapted to fruit culture, and such is the country along the line of the Chicago Branch of the Illinois Central Railroad, commencing near Chicago and ending at Villa Ridge, in Pulaski County, a distance of three hundred and fifty miles. Its constant succession of climate, modified by alternate elevations and depressions, its various soils and almost inexhaustible fertility point to it not only as the great source of supply of the summer fruits but the great fruit growing region of the Northwest.

This is not all; running as it does, due South, we can almost perceive a change in the progress of the season at every station.

In the shipment of all perishable fruits, time is of the first importance, and cheap freight the second, and in these two consist the elements of success. Should we diverge off to the Southwest, we largely increase the distance to reach the same parallel of latitude on the same level.

This adds to the cost of transportation and the time between the picking and that of reaching the customer, and in many cases this latter would prove fatal, as the fruit would be sour on arrival. Therefore, though a South-western, or a Southeastern location be selected, these would be good, but the direct line South is the best, and in a time of close competition would turn the scale in favor of the latter. While the sum-

mer fruits command a high price and the market not fully stocked, the difference is not so perceptible, because the growers on both routes make a fair profit, but the time is not far distant when the market will be fully supplied, and those who can furnish the cheapest will have the trade. A difference of one or two cents a quart, a few hours time in the transit that will bring the fruit to market in a better condition, will settle the question of priority and profit.

Strange as it may appear, the profit of fruit growing along this whole line of three hundred and fifty miles is pretty well averaged. Those from the South end have high rates of freight and extra cost of package to off-set the high price. It is, therefore, a nice question to decide which point in the whole distance is the most valuable, when we take the whole range of fruits into consideration, but when we take a single fruit the case is different. No one would think of growing peaches for market near Monce, nor currants on the hills of Egypt, while strawberries are a favorite at all points.

We will take up some of the leading summer fruits, and point to their particular location, and the season of maturing. And first of

### THE CURRANT.

This fruit delights in a cool, moist climate, and is particularly valuable along the Lake shore, but here it comes so late that the more Southern fruits crowd it to one side, the strawberry being in market from the South nearly a month ahead of it. Mattoon, a hundred and eighty miles South, is the Southern limit of this most valuable of all summer fruits. Not the limit of its growth, but the limit of its profitable culture. From this point it can be sent to market the first of June. Ten days after the strawberry is ripe at Cobden. It then comes in direct competition with this fruit, which, at that time has become cheap and abundant in market. When we say that the currant is the most valuable, we do not mean to be understood to say that it is the most popular. At the season of its maturity its clear acid is of great value in warding off the diseases incident to summer, and thus as a prophylactic is of inestimable value. Its value for wine within the range of its culture, is not second to that of the grape. It carries well to market both in its green and ripe condition, and must be in better demand both for the table and for wine making in the city. It can, therefore, be profitably grown within the range indicated.

## THE STRAWBERRY.

This fruit has now become not only a luxury, but a necessity, and the ease with which it is cultivated has brought it within the reach of even the poorest class of our city population.

It begins to ripen at Cobden, about the 15th of May, and in some seasons a few days earlier. It is then in bloom in the neighborhood of Chicago. Being the first fresh fruit in market, it commands a high price, say, from fifty to sixty cents a quart; but this only continues a few days, when the price is more reasonable. The growers of this fruit at Cobden must be at the expense of boxes and cases; these cost a trifle over one and a half cents a quart. After deducting boxes, cases, freight and commission, the average nett receipt for the Cobden strawberries is only ten cents per quart to the grower. At Centralia and Tonti we understand the growers received full as much. At Champaign the wholesale price was not less than ten cents, while the Chicago grower, selling to his customers direct, saving commission and boxes, realized nearly as good a price. Thus we see that after all, that at all points the growers received the same nett returns. These are facts. In the case of the Cobden growers, we have the returns of the largest grower, of the sales from day to day. This, of course, was at wholesale, the average being after deducting freight and commission, the first lot of twenty-eight boxes, at 31 cents, the next of 116 at 23½ cents, and running down to 6½ cents. Of course they were retailed above this, but next season the growers will put them up in cases of six, twelve and sixteen quart boxes, and they will be sold to consumers by the wholesale, thus cutting off the petty dealer with his high tariff. This will at once double the demand, for where the grower sold by the case of thirty-two quarts at twenty-five cents per quart, the retailer sold by the single quart at thirty-five, and even forty cents. Under the new system, the consumer can obtain his case of six quart boxes at \$1.50, whereas, he would pay \$1.40 for four boxes to the retailer.

When the Chicago grower comes into market, he can supply the consumer direct at such a low rate that all can purchase. Now if he sold at wholesale, and the retailer had his profit, the demand would decrease just in proportion to the added price; but in this case, if the grower or petty dealer wishes to keep them to supply his customers, he must do it at a more nominal rate. At the price at which the Cobden strawberries

are sold to the consumer, the demand is limited to the wealthy, and the great mass of the people must forego them. But this will not be the case, for the amount grown at Cobden by the year 1864 will be so large that the price must be reduced; but this to the grower can be but a trifle or his profit will be gone. The railroad company cannot reduce the freight much, if any, below the present, as they now take a car load of six tons in the passenger train at \$90, and small lots at \$20 per ton. The reduction then must be with the dealer, and the consumer must buy of first hands, and by the case of six quarts, and if these cases must be broken, let it be done at the agency at a small cost, say, one or two cents per box. There is no other way to protect the Cobden grower. Large quantities would in this way go to the country. A person could take his case of six boxes under his buggy seat and they would ride perfectly safe. Now he can do nothing with them, and the high price compels him to wait until his own farm may provide the coveted luxury.

Chicago is not the only point to be supplied, but even Cincinnati, for at least ten days, will purchase at Cobden and neighboring points. Galena will become a distributing point also, and thus thousands of acres of this delicious fruit will be grown among these romantic hills, to please the taste and to give health and vigor to the North. We have no fears that it will be overdone, or that the price will fall below the cost of production, but the profit to the petty dealer must be dispensed with, and hereafter all growers South of Monee will do well to make their arrangement and purchases with a view of reaching the consumer in the most direct way. When we come to discuss the culture of this plant, and the mode of marketing, we shall have more to say under this head.

## GOOSEBERRIES.

This fruit, as yet, is but little known in our market. The long years spent in proving that the English gooseberries are a failure with us, had well nigh blotted them out from the list of summer fruits. The Houghton, American Red, Mountain, and other American seedling gooseberries have proved hardy and productive, and will, in a short time, fill an important place in the list of summer fruits. They do well along the whole line above indicated. At Jonesboro they are beginning to be largely grown for the Northern markets. The first shipments in a green state commence in May.



## BLACK CAP RASPBERRY.

This is one of the early fruits that can be grown abundantly along the whole line. The supply, heretofore, has come from Cincinnati and vicinity, where thousands of acres are grown, and sent to market in both the ripe and dry state. We know of no one beside ourselves, who has attempted their field culture in this State. We have about an acre set out, and which promises to give an abundant yield. By taking the season along the route indicated, the supply would be for several weeks, if not over two months.

## BLACKBERRIES.

This fruit is just beginning to assume a prominent position in the Northern markets. Its very perishable character has prevented any large amount from being sent from the South part of the State, but with the growing importance of the summer fruits, it has become an object with the Illinois Central Railroad to give better facilities for a rapid transportation, and now nothing is wanting but to fit up the cars, so as to give proper ventilation to such fruits as sour in a few hours, when put in a close, ill ventilated car. Not only the cars, but the cases that contain the fruit must be so constructed that a free ventilation of air will at all times reach the fruit. This fruit ripens in the South part of the State by the tenth of June, and as the season closes in Michigan the middle of August, we have this fruit in all its health-giving freshness for a season of sixty days, or nine weeks. At present, no attempt is making South of Chicago, to give this fruit field culture, but this must be resorted to, as the market will demand a more sure supply and of better quality than those from the border of the fields and woodland.

We have never seen such crops of fruit anywhere as those growing wild about the fields in Northern Mississippi, but the perishable nature of the fruit, and the long distance to the Northern cities, put the crops beyond our reach. At the South part of this State thousands of bushels can be had annually at an average cost of four cents a quart, or less than a dollar and a half per bushel. All that is lacking is for dealers to provide the proper boxes and to attend to the shipping. We think the reason this product has failed to reach the market in good order, is the packing in drawers and in close cars. The fruit is too abundant and too cheap to be thus thrown away. Its value for wine is well known; but yet few persons take the trouble to make it.

We often purchase the fruit at twenty-five cents a water bucket full, or about two and a half cents a quart. On several occasions we have been in Egypt during the season of this fruit, and have sent it to our friends in Chicago, and to our home without difficulty, by putting it in willow baskets and allowing it the air of the express car. Who will make a fortune out of the native blackberry of Egypt next season?

## THE TOMATO

Has a royal claim to a place among the summer fruits. It is sent from Cabden, June 25th, and our Cincinnati friends purchased their supply from there as late as July 14th, the past season, again showing that for the very early fruits, the South part of State is without competition from any available quarter.

The tomato has the disadvantage of great weight, and the price cannot, therefore, be so much reduced as that of other fruits, and therefore, the culture cannot be too much extended without ruining the business.

It will always be one of the most uncertain crops as to price, that is cultivated in the South part of the State. An over-crop, or an early season at the North, will always seriously affect it. It can be grown in hot-beds and in cold grapes at the North, in quantity almost equal to the demand, the glass structures overbalancing the cost of freight and package. We therefore place the tomato among the less valuable of the summer fruits, as in its case, skill, manure and glass is a match for sunny skies.

## GRAPES.

Thus far, this fruit has not given satisfaction at Cobden. Though we place it among the summer fruits, yet it may be questioned whether it is strictly so along the whole line under discussion. But its importance among the late summer and early autumn fruits would hardly allow us to pass it over in this connection.

The Catawba and Isabella are the varieties thus far put under trial, and during the past three years, the only ones in which vines, to any extent, have been fruited; they have suffered seriously with the rot. What the result may be with other varieties, we have no reliable data upon which to base our opinion, but enough has been developed to convince us that the middle of the State is a better grape region than the extreme South. The basin of Egypt and through the whole plateau of Central Illinois, we think the grape will be found to flourish. At Cham-

paign the experiment tends strongly to corroborate the above. Many suppose that for the grape we need steep hill-sides and very sunny exposures, but this is not necessarily so; in fact, we think common rolling ground with a Southern aspect is all that we require for this fruit. The Isabella, the great table grape of the North, does better a hundred than three hundred miles South of Lake Michigan. The wine region will probably be found South of Odin, or at least not far North of it, and it is certain that some other variety must take the place of the Catawba, unless the climate, or a change in culture should ward off the rot which is now so destructive to it. Among the numerous varieties now on trial, we have no doubt that several will be found adapted to the various soils and shades of climate along our favorite fruit tract.

#### PEARS.

This fruit has been successfully cultivated in many parts of the State, and when well sheltered by belts of forest trees from the severe prairie winds, it is believed that it can be grown to more or less profit in all parts of the State, but that part lying South of Neoga gives promise of being the most valuable for this fruit. Thus far, in the neighborhood of Cobden, this fruit is apparently of as easy culture, as the apple and dwarf trees of three and four years planting, are loaded with the most perfect specimens of fruit.

We are learning much that is of value in pear culture, and unless cut short by the blight can see no reason why this fruit may not take its place among the other desirable summer fruits.

#### THE PEACH.

We must set down Champaign county as the first point South, from which occasional crops of this fruit may reach the market. It is quite certain that a fair average crop can be grown there two out of four years. But the crop is not only too late in maturing to warrant us in large speculations, yet it should fill an important place in every orchard and in every fruit garden. Trees should be planted every year, so that if an untoward winter comes along, that all will not be destroyed. In going South, we must reach Neoga before we would recommend peach orchards for market, and from this point, on all the well drained lands, and those thrown into ridges as at Tonti until we reach the Big Muddy, we consider the climate and soil as valuable, or at least as profitable for peaches as those among the hills of the grand chain. We are aware that there is

a prejudice in favor of those hills exclusively; this is so as to the early crop, and doubtless the finer varieties of foreign peaches, but for the main crop we think that whole section the most valuable for this fruit. At Alma, a few miles North of Odin at the crossing of the O. and M. road, we have seen some of the best peaches sent to market. One person had shipped a thousand boxes up to the 20th day of August, less than two weeks later than from Cabden. The truth is all of that part of the route lying between Neoga and Desoto has been overlooked by persons seeking for a suitable location for the peach and other fruits. From several years of observation, we know this to be the true state of the case. The more level condition of the country gives it greater facilities for culture, its grasses furnish hay and pasturage which in turn furnish manure, a necessary element in the culture of the summer fruits. We therefore call the attention of the fruitgrower to that part of the route above indicated. In the settlements at some distance from the railroad, large amounts of fruits are now produced; but the long land carriage will not admit of the profitable culture of this fruit, which must, from this cause, confine it to a narrow belt along the route indicated. It will thus be seen that the peach district is not so limited after all. That the whole basin of Egypt will produce the fruit, is sufficiently evident, but we know that it cannot bear a long land carriage and that for market purposes its culture must be limited to narrow belts along the railroads.

#### THE APPLE.

Say what we may of the summer fruits, they individually sink into insignificance as compared with this king of fruits, for it not only takes its place among the summer fruits, but extends its time through the long winter, and through the spring, until the strawberry and currant come to fill its place. It is the great utilitarian around which they all revolve as lesser lights, though taken in the aggregate, are of no small importance. The apple has a wide range of soil and climate, and from long use has become an essential element of our food. It is eaten raw, baked, stewed, boiled, roasted and fried. It comes on the table in a hundred palatable shapes, in some of which it is welcome to all. While peaches sell at one and two dollars a box, this fruit is less than half the price. From the South part of the State, Red June, early Harvest and other early sorts reach the North early in July, and even the last of June. At Cincinnati it

is shipped by the middle of July; at Champaign the first of August, and ripe apples come into the Chicago market by the country teams by the middle of August, and cooking apples nearly a fortnight earlier. The crops of this fruit are not certain through the North part of the State, only in *favorite locations*, and the true region of the apple commences near Paxton, some hundred miles to the South of the city. Here the late frosts fade out and leave the fruit unharmed. Thence along the route South this fruit is a favorite, the farmers along the route avering that it never fails, which we can well believe.

The early settlers never dreaming of a demand for summer apples, were content to plant those of winter, and here along this whole route there is not enough of summer apples to supply the local demand. But this defect will, to a great extent, be remedied in the next half dozen years. In fact, neither the city of Chicago, nor any of our Northern towns are, as yet, half supplied with good summer apples, even at the present high rates, (\$4 per bbl.) The idea is too prevalent that the hills of Egypt is the paradise of Pomona. True it is the seat of her power, but her worshipers dwell along the route indicated, the whole distance of three hundred and fifty miles. and it is here that a great line of fruit growers will plant and cultivate the summer fruits for the North. But few orchards of summer apples have as yet been planted. In our own apple orchard of fifty acres we have planted about one-third summer varieties, and we regret that the whole had not been set with them. Apples can be sold from the orchard at half the cost of those kept over winter, but at present they bring a better price. With a reduction of price comes a large demand, as the consumption will be increased. We would call the attention of orchardists to the great value of the apple district lying between Paxton and Desota; more particularly that portion North of Tonti. South of that point the summer apples will pay a good profit, but are subject to certain diseases, to which those more North have not as yet been liable.

#### THE CHERRY.

This fruit is so little known in market, that people seem to think that it cannot be grown. This is true of the heart and other sweet cherries, but of the morello family we can have an abundance, beginning in May and closing in July. The May Cherry or Kentish of Downing, the Montmoreny,

English Morello, and two or three others are hardy; but the most valuable of all is the May, when grafted on the common Morello stock. It is then hardy and productive, not having failed for the last eighteen years—since its first fruiting in the North part of the State. The English Morello is not so productive, but as it is some two or three weeks later, is valuable on that account. This cherry is not as vigorous at the South part of the State, but is productive and ripening about the middle of May, comes in a most acceptable time. Large orchards of this variety are set in the West part of Cook, and in the East part of Du Page counties, more especially in the towns near Cottage Hill. We have set six hundred trees at this point, and with this exception, we know of no large orchards until we reach Cobden, where individuals have from fifty to a hundred trees each. This fruit now readily commands from four to five dollars in Chicago, but would be very profitable at half that sum.

#### THE PLUM.

Until some effectual remedy can be found against the Curculio, we must despair of the extensive culture of this fruit. Of this we have hopes in that class of cannibal forest insects that have come to our aid in other departments of the insect tribes. We shall not despair at least they can begrown in a small way about the barn yard and the pig pen.

#### PROTECTION.

We do not wish any of our readers to understand that planting an orchard on the open prairie will ensure success. Protection by groves, river belts, or belts of trees planted for the purpose, or untrimmed hedges, are needed to ensure success. Of these and other essentials, we shall treat at large hereafter.

Within the past year we have received over two hundred letters from persons in almost every State in the Union, making inquiries in regard to fruit culture in this State. To all such the above will be a more full and satisfactory answer than our limited time would enable us to give. We shall take up the subject of the culture of the several fruits, as best adapted to the soil and climate along the whole route indicated, which must stand unchallenged as the most profitable region for the culture of the summer fruits, in the whole valley of the upper Mississippi.

### The Army Consumption of Wool.

The New York *Economist* indulges in some speculations, as to the effect the call for three hundred thousand men will have upon the future price of wool. If the *Economist's* estimates are correct, what may we expect on prices in view of the additional requisition of the President for three hundred thousand more men.

"The call for 300,000 additional volunteers has an important bearing on the wool trade of the country. When the new quota has been raised, there will be 850,000 troops requiring a regular supply of army clothing. Each one of these carries, in the shape of his complete outfit, woolen manufactures representing about 25 pounds of raw or unmanufactured wool. In times of war, the excessive wear and tear, the irregularities and losses from various causes, will make the consumption average nearly three outfits a year per man. At a safe average, it may be reckoned that the yearly consumption of each soldier will amount to sixty pounds of unmanufactured wool. This amount, multiplied by 850,000, would give, as the total consumption of wool by the army for the next twelve months, the enormous amount of 61,000,000 of pounds. The aggregate seems immense, but a careful inspection of the estimate show that it is not exaggerated. How this enormous consumption must bear on the trade in wool and woolens, deserves the prompt attention of those interested. The whole product of wool in the United States in 1850, according to the returns of the census, was only about 51,000,000 pounds. The statement was probably far below the truth, as are nearly all the figures representing the produce of the country; and it, therefore, gives imperfect data from which to estimate the present crop. We have, as yet, seen no statement from the census of 1860, as to the present wool product of the country; and can therefore merely make a loose estimate as to the amount. We should, however, represent the most general estimate of the wool trade in supposing the present crop, in the now loyal States, to reach about 120,000,000 pounds. According to this estimate, the army demand will take up about 42½ per cent. of our whole crop of wool. It is unnecessary to indicate the effect of this extraordinary demand on the value of the staple. The demand will be mostly for the lower grades of wool, which, as last year, may be expected to realize fabulous prices, and out of all proportion to the value of finer grades. It may perhaps be questioned, however, whether we shall this year

witness such a depreciation in the value of fine grades as was experienced last. The largeness of the demand may be reasonably expected to give an enhanced value to all qualities; though, as the finer grades have no preference for army purposes over the coarser, they may not be expected to range so much higher than common wools, as is the case in ordinary times.

It is not improbable, under these circumstances, that we may witness an unusual importation of foreign wools. Although both the tariff and exchange are against its importation, yet prices may range so high as to render these considerations secondary.

The effect of this extraordinary consumption of army woolens must be to inflate and derange the ordinary business in woolen fabrics. Probably, the machinery employed last year in manufacturing military goods might be sufficient, if running extra time, to meet this demand. But that proportion of our woolen machinery leaves but little for meeting the demand for ordinary goods. The result will probably be that fabrics for civilians' wear will be light in supply and realize high prices."

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**CHICKEN POT PIE.**—Wash and cut the chicken into joints; boil them about twenty minutes; take them up, wash out your kettle, fry two or three slices of fat salt pork, and put in the bottom of the kettle; then put in the chicken, with about three pints of water, a piece of butter the size of an egg; sprinkle in a little pepper, and cover over the top with a light crust. It will require one hour to cook.

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**POTATO YEAST.**—Five large potatoes boiled and mashed, three pints of boiling water, flour enough to make it a little thicker than flap-jacks, and one cup of yeast. This is enough to rise five loaves of bread, which may be mixed with water, or milk, and will rise enough while your oven is heating. Save out enough of this yeast for your next baking.

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**FRUIT AT THE EAST.**—Not for many years has there been such an abundance of fruit of all kinds in the Eastern States, as the present. The apple trees, especially, are loaded with fruit. There are pears, plums and grapes, while there are vine in great profusion. Plum trees, in many localities, have suffered severely for the last three or four years, from curculio and black knot, many fine orchards being nearly ruined, yet growers are not, in all instances, discouraged, and many new trees have been set, the owners confidently hoping for success.—*Rural New Yorker.*

### Fruit Trade in Oregon.

In compliance with your request to furnish you with statistics of the fruit trade during the earlier years of the business, I regret that we are able only to give a very meager account.—Our connection with the business dates back only to 1856, and those who could give only the desired information have gone out of the business and left the city. We kept no record of the trade further than our own transactions, till 1858.

The first grafted or cultivated fruit was brought to this market from Oregon, by Messrs. Meek & Luelling, in 1853. They brought about four bushels, or about 200 pounds, from the sale of which they realized about \$500. In 1854 the same parties brought to this market, as near as we can learn, about 40 bushels which they contracted on arrival, to George Hughes, at \$1 25 per pound; but on delivering, they were found to be damaged by heat in the steamer, and the sale was settled at 87½ cts. per pound, realizing about \$2,500.

In 1855, the receipts from Oregon amounted probably to some 1,500 boxes, prices ranging from 50 cents to \$1 00 per pound. In 1856 the receipts amounted to several thousand boxes, sales ranging from 25 to 75 cents per pound.

In 1857, the receipts, we should judge, could not be less than 15,000 boxes, sales ranging from 15 to 50 cents.

In 1858, the receipts amounted to 29,190 boxes, sales from 7 to 35 cents.

In 1859, the receipts amounted to a little over 72,000 boxes, the sales ranging from 3 to 5 cents.

In 1860, the receipts amounted to about 86,000 boxes, the sales ranging from 3 to 19 cents per pound.

Of the crops of 1861, the receipts are as follows:

August, 539 boxes, at an average of 3 cents per pound.

September, 2,353 boxes, at an average of 3 cents per pound.

October, 3,300 boxes, at an average of 3½ cents per pound.

November, 14,313 boxes; sales at 2@7½c.; average 5c.

December, 21,681 boxes: sales at 2@6c.; average 4c.

January, 3,891 boxes, sales at 2@4c.; average 3c.

February, 15,425 boxes; sales at 2@3c.; average 2½c.

March, 9,131 boxes; sales at 2@11½c.; average 6c.

April, 4,447 boxes; sales at 2@8c.; average 5c.

May, 334 boxes; sales at 4@10c.; average 8c.

June, 160 boxes; sales at 6@12c.; average 10c.

Total receipt foot up at 75,394 boxes.

The above exhibits the amount of Oregon fruit received and sold in this city during the past season, and the range of prices obtained each month. Very little of the early fruit was shipped here, the market being so well supplied with

peaches, grapes, and other varieties, that prices would not warrant the sending of early apples to this market from Oregon.

Late fall and early winter fruit found ready sale at paying prices, the market being more steady and uniform than any preceding season. During the winter, prices ruled much lower than any former season, although the supply was not near as large as that of the winter of 1860 and 1861.

The rains and floods of this State caused an almost total suspension of business and trade with the interior towns of the State, so that there was very little outlet for fruit beyond what was consumed in the city. Again, much of that received in January and February was out of season—varieties that should have been in market six or eight weeks earlier, it having been detained by floods and the closing of the Columbia river by ice.

Hence much of it had been frosted, and arrived in a damaged and often nearly worthless condition.

These causes combined have rendered prices less remunerative to dealers and producers than any former year.

The total receipts from Oregon have been about eleven thousand boxes less than of the crop of 1860, and only three thousand boxes more than 1859, while the range of prices has very materially diminished each succeeding year. This is explained by the large and annually increasing fruit crop of California, which will soon be sufficient to supply the wants of this market.

Even the past year, peaches were so abundant as to pay only a small profit to the producer above the expenses of gathering and transportation to market; and large orchards just coming into bearing indicate a plentiful supply of every variety, in a few years. We have taken much pains to ascertain the amount of California fruit sold in this market, of the crop of 1861, with the following result:

Apples, 57,735 boxes, at an average of 50 lbs per box.

Apricots, 2,178 baskets, at an average of 30 lbs per basket.

Cherries, 1,790 boxes, at an average of 20 lbs per box.

Figs, 438 boxes, at an average of 30 lbs per box.

Grapes, 30,730 boxes, at an average of 50 lbs per box.

Nectarines, 1,255 baskets, at an average of 30 lbs per basket.

Peaches, 130,368 baskets, at an average of 30 lbs per basket.

Pears, 17,890 boxes, at an average of 60 lbs per box.

Plums, 6,784 boxes, at an average of 25 lbs per box.

Quinces, 250 boxes, at an average of 50 lbs per box.

Besides these, a large amount of strawberries, raspberries, blackberries, gooseberries, and currants, of which we have made no estimate.

In compiling the above, we are much indebted to the different Commission Fruit Dealers, most



of whom have kindly given us the amount which has passed through their hands. The amount given above is somewhat short of the actual reports, as several declined to give any figures, and a considerable amount was sold on the wharves by the owners, of which we have been unable to get any account.

We have made no estimate of the amount of sales in dollars and cents, but probably it would exceed half a million of dollars, and the great bulk of the fruit has been consumed in this city. The interior towns had a supply of their own raising until into October. During the Winter, the demand for fruit from the interior was very limited on account of rains and floods which prevented almost entirely the transportation of any kind of goods to the inland towns.

Respectfully yours,

KNAPP, BURRELL & Co.

310 Washington st., San Francisco.

—Oregon Farmer.

—Two dollars and a half a pound for apples, is certainly a good beginning, and no wonder that it stimulated fruit growing in Oregon; but even two and a half cents a pound, had ought to pay. Two cents, or a dollar a bushel, is satisfactory in our best markets at retail.

From what our old and esteemed friend, S. Francis writes us from that far off country, Oregon, is the paradise of the apple and small fruits.

Ed.

**THE CROPS.**—The American Agriculturist condenses the accounts of 1,500 reporters from 24 States concerning the growing crops from which we make a brief condensation:

In Illinois, Wisconsin and Michigan, fears are entertained of a falling off from ten to twenty per cent. in the corn crop; but in Ohio, Indiana, Minnesota, Pennsylvania and the New England States, above the average breadth was planted.

In New York and New Jersey, corn looks poorly.

Wheat, in the Middle and Western States, is fine and well secured.

In Ohio it is estimated at 56 per cent. better than common; in Indiana, 44 per cent.; in Illinois, 30 per cent.

Spring wheat will average a small average yield in Wisconsin, Iowa and Minnesota, where little winter wheat is grown. The estimate is 15 per cent. below the average. The great breadth sown, it is said, will make up the aggregate equal to last year.

Rye is reported up to an average.

Oats are affected by the rust.

The forage crops of the West are reported as remarkably good. In Pennsylvania 20 per cent. above the average; in New York, below the average; so in New England.

Barley is represented better than usual.

Flax is remarkably good, it being 12 per cent. better than usual.

Tobacco is backward but promising.

Peas, beans, etc., promise well. The grain prospects in Europe are not promising.

### The Country Child.

With mingle trembling and delight,  
And slowly falling feet,  
A little country maiden, now,  
Is passing down the street;  
A country child—I know it by  
Her timid air, her wand'ring eye.

The warm sunlight has kissed her brow,  
And tinged her cheek with brown;  
The odor of the violets  
Comes with her to the town,  
We almost guess the woodland place  
Where she has dwelt, from her sweet face!

We almost read her inner thoughts,  
Through her large wistful eyes,  
How bright to her the city seems,  
How much like Paradise,  
As Nature's child, with bounding heart,  
Looks for the first glad time on Art.

The merchant in his storehouse door  
Smiles as she passes by,  
The laborer pauses in his work,  
To watch her with a sigh,  
Where'er she wakens dreams  
Of shady nooks and rippling streams.

She seems to bring the country here—  
Its birds, its flowers, its dew—  
And slowly, as amid the throng,  
She passes from our view,  
We watch her, sadly, as we might  
Some pleasant landscape fade from sight.

Ah well! we would not keep her here,  
These dusty streets to roam—  
So fair a flower should open with  
The daisy buds at home;  
'Mid primrose stars, as sweet and wild,  
As she will be—dear, woodland child!

**GOOD, WHOLESOME SMALL BEER.**—Take two ounces of hops, and boil them three or four hours, in three or four pailfuls of water; and then scald two quarts of molasses in the liquor, and turn it off into a clean half-barrel, boiling hot; then fill it up with cold water; before it is quite full, put in your yeast to work it; the next day you will have agreeable, wholesome small beer.

**SIMPLE REMEDY TO PURIFY WATER.**—Pulverized alum possesses the property of purifying Water. A large spoonful stirred into a hogshhead of water will so purify it, that in a few hours it will be as fresh and clear as spring water. Four gallons may be purified by a tea-spoonful.

**MEASURE CAKE.**—Take one tea-cup of butter and stir it to a cream, two tea-cups of sugar, then stir in four eggs that have been beaten to a froth, a grated nutmeg, and a pint of flour; stir it is ready to bake. It is good daked in cups or pans.

**HUNGARIAN GRASS IN ILLINOIS.**—The Prairie Farmer says that the agriculturists of Illinois have been experimenting with this grass four or five years. Each succeeding season a larger breadth has been grown and it may now without doubt, be considered one of the standard crops of the West. Many of the extravagant claims at first urged for it have been laid aside, as have also many of the objections that, later, were brought against it. It is a prolific, yielding considerably more per acre than either the prairie or tame grasses, and is superior to the common millet, thought not differing materially from it in its nature. Its seed is more oily, and consequently a heavier feed than millet, is a somewhat more vigorous grower, and hence a surer crop. Indeed so deep rooted is it, that severe drouth does not affect it in the least, and may be sown upon the highest and driest soils without fear of failure. All kinds of stock, cattle, horses, sheep, and hogs are extremely fond of it, and when fed judiciously, we have yet to hear of an instance where any injurious effects have followed its use. Doubtless many horses have been injured, perhaps killed outright, by its use, but these cases, to the best of our knowledge, are where the seed has been given immoderately, just as over-feeding of any heavy grain will produce disease in animals. Some have complained of its being an exhaustive crop, but we think it has not been found more so than wheat, and, like the latter crop, the ground is left in most excellent condition—light and free from weeds. Corn does well as a succeeding crop. Hungarian may be sown any time from the 7th to the 15th of June, and if to be cut for hay alone, perhaps a little later. If for hay, sow one-half bushel per acre; if for seed, about one-third of a bushel is sufficient.

**THE ROAD TO POOR FARMING.**—As the road to POOR FARMING is not generally understood, though it is crowded with travelers, we throw up the following landmarks, from the Springfield "Republican," for the common benefit:

1. Invest all your capital in land, and run in debt far more.
2. Hire money to stock your farm.
3. Have no faith in your own business, and be always ready to sell out.
4. Buy mean cows, spavined horses, poor oxen, and cheap tools.
5. Feed bog hay and mouldy corn stalks exclusively, in order to keep your stock tame; fiery cattle are terribly hard on old, rickety wagons and plows.
6. Use the oil of hickory freely, whenever your oxen need strength, it is cheaper than hay or meal, keeps the hair lively and pounds out all the grubs.
7. Select such calves for stock as the butchers shun; beauties of runt, thin in the hams, and pot bellied; but be sure and keep their blood thin by scanty herbage; animals are safest to breed from that have not strength to herd.
8. Be cautious in the manufacture of manure; it makes the field look black and mournful about planting time; besides it is a deal of work to haul it.

9. Never waste time in setting out fruit and shade trees; fruit and leaves rotting around a place make it unhealthy,

**LATE SUMMER PLANTING.**—The Gardener's Monthly says, more evergreens have been planted in August and September, in the neighborhood of Philadelphia during the past three years, than in all other months, and not one in a thousand fails. There has been quite a revolution in regard to the time in planting evergreens.

—There can be no question as to the value of the above time to plant evergreens. The growth is then perfected for the season, and the very best time of all is before the buds start in the spring, which is in April. It may do in Maine, and at other points east, to move evergreens after commencing the seasons growth, but our experience is against it. It can be done but at the expense of the growth and risk of loss.

At any time during the season, in a long continued rainy spell, evergreens can be moved without so much damage, but we would not attempt it unless the tree must be moved for particular reasons.

### Fruit Growing in Southern Illinois.

Dr. Meeker, of Dongola, Illinois, writes to the Farmer's Club, of the American Institute concerning the fruit business in the vicinity of South Pass:

Ten miles above Cairo, the Illinois Central railroad enters a hilly country, and thirty miles further north, the hills are from 200 to 500 feet high. Usually there is enough level ground on top for common-sized farms. The passenger sees tasteful cottages standing on lofty eminences and on the edge of jutting crags. What at a distance seem rows of corn, would, upon near approach prove to be rows of fruit trees. At the stations, boys offer for sale pears and beautiful peaches. And yet no part of Arkansas contains a people more deeply in sympathy with the rebels in their attempt to destroy this government, than are a majority of the people in some of these counties.

At South Pass, Union county, forty miles from Cairo, live some twenty fruit growers, each having from twenty to eighty acres of peaches, pears and apples. They understand their business well, and they are distinguished by the Yankee characteristics of industry, shrewdness, and intelligence. The natives know they are not cowards, and they know what cowardice is.

Within the distance of a few miles around this place, I estimate there are from 700 to 800 acres of peach trees. Two or three car loads of the nicest peaches you ever saw leave by special train for Chicago; the receipts of the owners of these orchards range from \$10 to \$300 a day each. The season will last from fifteen to thirty days. Some have contracted for their entire

crop at \$2 a bushel, delivered at the station. The prices would be thirty per cent higher, if change were plenty.

The natives are astonished, and they are going to raise fruit. For the most part they will do nothing; they do not know enough to raise fruit. One may think he knows how but that does not help the matter. The greatest obstacle which prevents many from succeeding, is the competition they meet with in men who know more than they do. Industry is truly important, but alone it will not win. Still it is by no means difficult to raise fruit. I think that frequent visits to the best orchards, and a good share of common sense, will enable one to succeed. If he do fail, he will be a fool if he does not try till success crowns his efforts.

Still, from various causes, not more than a quarter of the fruit trees set out in our country will amount to much. The price of fruit has advanced during the last twenty years. In twenty years more, if fruit growers are very industrious and if too many children are not born, common people may be able to buy early fruit; and early fruit may be raised as easily as late fruit. A man who works right, can afford to work for less than one who works wrong. That is, if he have the product of his industry to dispose of.

Let a wike-awake Yankee come hither and set out well known good varieties, and he will do well. He will want ten or forty acres of good, high land. Ten acres will do as well as forty for many men. At South Pass, suitable sites sell from \$20 to \$30 per acre. When covered with bearing trees, they easily sell for \$100 an acre. There are farms which can be sold for \$150 an acre, and the trees are only four years old. They make the trees bear at this age, often sooner. I saw trees two years from the bud for which \$5 were given for the fruit from each tree. South of the point named, good improved farms near stations, and where peaches never fail, can be bought for \$15 an acre. I know of twenty or thirty such chances. The railroad will sell suitable land, mostly timber, for less, and give long time. They offer every inducement to fruit growers. The freight that is paid them for an acre of peaches, exceeds what they get for what is paid for a hundred acres of wheat. The receipts from five acres of peach trees in full bearing, will buy a good farm.

Pears do well here; so do apples and strawberries. Plums, cherries, and currants do poorly. Grapes are uncertain; they rot. One man expected to have twenty tuns; he hopes to have two. Much disappointment is felt regarding certain varieties of peaches. The early York, serrate was supposed to be the earliest and best; it rotted. One man makes his loss \$3,000 by the early York, and yet his receipts will reach \$500. The early Troth rots. Crawford's early is the finest peach, but it is so large that it does not retail at a profit, and it is a shy bearer. The first shipments were the early Tillotson, which was about the 18th inst. The peach which ripens first is wormy; it ripens first because it is stung. The peach which now is esteemed most for the qualities of earliness, size and color, is the Honest John of New Jersey, and Western

New York. The fruit is full size, fair color, mostly red, flavor good.

Some wishing to come hither, would like to know how much money they ought to have. I consider myself posted on this head. I answer that with two to five hundred dollars, you can start yourself handsomely. With five hundred dollars you can do well. Some have commenced with less, but whatever you have, you must have earned it at some kind of labor or honest business. If you have come by it without labor, you probably will loose. If you have been brought up idly, and have money but what is given you, put it out at interest, and then come and support yourself a year or so by days work, when you can safely use it. The kind of business you have been accustomed to is comparatively of little consequence. If one can walk to the East, he can walk to the West. Some have nothing to come with. It is difficult to advise them. Industry and patience will go far. If one has a family and no money, what can he do? Still, fair intelligence being given, one can work wonders, providing he only has the constitution of a horse and the energy of a lion. Such can get money anywhere. These are the conditions.


Some will want to know whether we have any ague and game. We have some of the first, but Ayer's ague cure soon disposes of it; and we have less of the latter. However, bring a gun. If you cannot well do this, carry a lot of percussion caps loose in your vest pocket, or buy a pair of light bullet moulds, and keep them bright by rubbing them in your fingers when in company.

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**TIMBER FOR BEE PASTURES**—The Bee Journal advises those wishing to improve their bee pasturage to plant maple, locust, chestnut, and linden trees, and to encourage others to do so. In setting out ornamental trees, it is surely worthy one's attention to have regard to their honey-producing power, and to select, with this end in view, those blooming at different times, rather than all of one kind, or those blooming at the same time. We would like to know the comparative value of these trees for producing honey, and also which varieties of those mentioned are the best.

For timber, the yellow locust is the most valuable. It is extensively planted on the western prairies, where it grows very rapidly, and is chiefly used for railroad sleepers. In Southern Ohio, bees, some years, gather a large portion of their surplus honey from the locust. Their industry during the yield from the locust is surprising. Where the trees grow in great numbers, they almost abandon all other sources of supply.

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 Gov. Curtin of Pennsylvania, states that 75,000 men have responded to his call for the defense of the State, and anticipates that the number will be raised to 100,000.

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 In large assemblies there is more feeling and less thought than in small ones.

### What is a Curb? — Remedies.

*Editors Rural New-Yorker:*—Will you please inform me through your columns what is the nature of a Curb, or Curb Spavin, and the remedy, and oblige—T. F. W., Hall's Corners, New York, 1862.

Those who believe in the doctrine of "compensation," are always ready with the aphorism, —there is no great loss without some gain—and in the case before us the "reverse" of this maxim is equally trite. Curb is one of the evils almost exclusively belonging to the better class of horses. A man mounted upon a fine spirited horse—whether he can lay claim to any skill in equestrianism, or not—partakes of the spirit of the animal, and delights in "showing him off," the "fine points" are at once brought forth for exhibition. The animal responds, and amid the mutual excitement, the devoted servant bears the greater share of suffering and injury. Mayhew, in his celebrated work upon the horse, noticing this characteristic, remarks:

"Be it male or female, old or young, the equestrian is always pleased by the prancing of the horse. The creature seems to comprehend, and to derive gratification from obeying the wish of its superior. It enters into the desires of its dictator, without a thought of prudence, or a care for its personal safety. In hunting or in racing, the simple horse more than shares the excitement of its rider, and often encounters the severest accidents in consequence of these amusements."

Curb may be reckoned among the least of the sufferings of the horse, yet the mark of the affect on rarely disappears, and sometimes the animal is totally disabled thereby. The disease consists of an enlargement, or bulging out at the posterior of the hock, and is mainly caused by wrenching the limb on uneven ground; galloping at full speed; by prancing when mounted; leaping fences, ditches, etc. Horses following hounds in the chase are peculiarly subject to curb, and the authority already quoted states that in the districts where packs are kept, more of this disease is to be seen than in any other part of the country.

A certain class of veterinarians blister the instant a curb appears, but most writers consider the custom very injurious. Harm results in every respect. Mayhew would put on a high-heeled shoe immediately, and thus ease the overstrained tendon. The part ought then to be constantly wet with cold water, so as to lower or disperse the inflammation. A cloth doubled two or three times may be easily kept upon the hock, and this cloth kept always moist. Continuing this treatment, let the horse remain quiet in his stall, being moved as little as possible until the heat and swelling are diminished, and the leg almost sound. When the part has become cool, rub a blister all over the joint, and in the great majority of cases this will end the treatment.

The practice of *firing* the hock for the removal of a curb should never be resorted to, as the testimony of our modern veterinarians is to the effect that they have never yet known of any good

resulting therefrom. In addition to the agony endured by the horse so unfortunate as to be submitted to this barbarism, the appearance of the animal is ever after seriously affected.

The form of treatment prescribed by Dr. Dadd may be thus stated:

The curb is an enlargement which makes its appearance on the hind legs, about two inches below the hock. It is sometimes occasioned by a blow, but the most frequent cause is strain of the sheath through which the flexor tendons pass. If seen in its early stage, it would, in all probability, yield to rest and cold water bandages. But if neglected until effusion takes place, or the surrounding tissues become injected and thickened, and the horse becomes lame, then a different course of treatment must be adopted. Our usual remedy is, acetic acid, four ounces; powdered bloodroot, one ounce; turpentine one ounce; to be applied to the part night and morning for at least a week; afterward to be bathed daily with common vinegar.

There are cases, however, in which coagulable lymph will form, and may thus leave the parts in a state of callosity for some time, which only patience, constant friction, or the application of some stimulant can overcome. Among the various applications in use, we prefer the following: One ounce each of oil of cedar, oil of sassafras, oil of marjoram; one pint of soft soap, to be used daily, always rubbing in a downward direction.

### Hog Cholera.

FRIEND REED:—A stranger who looked as if he should have been better employed, has been in this part of the country for some time, peddling—with obligations to secrecy—a so-called infallible remedy for the prevailing epidemic among our swine. Several of our farmers gave him to understand that they considered him dealing in "small potatoes." He called on Wm. Lewis, whose hogs had just commenced dying, and was eager to do him the great service of saving his "rooters." Lewis soon made him an offer for his secret, but told him that he would do no such silly thing as to promise not to tell anybody—that whatever was a public benefit the public ought to know, etc. After some hesitation, the "Doctor" made a clean breast for the benefit of the world, and all the rest of us. The remedy is this:

For fifty hogs, take half a bushel of slacked lime, half a pound of copperas, and one handful of common salt; put them in a tight barrel, cover with water, and mix in shelled corn; when thoroughly steeped, feed it to your stock of hogs twice a week, and to those diseased twice a day. We are trying it in our neck of the woods, and apparently with success. Please tell your many readers, and let them do as seemeth them good.

DUDLEY.

Eliza, Aug. 19th, 1862.

(*Aledo Record.*)

—Diamond dust is as poisonous as strychnine]



From the Rural New Yorker.

## The American Black Cap Raspberry.

Now that this raspberry has come to be somewhat extensively cultivated for Market in Western New York, some hints from experience may be of general use. It has been rather undervalued by our berry growers until within a recent time, though it possesses qualities which will render it popular both for family use and in the market. No other berry is quite so easily and surely raised. It is no more work to plant it than it is to plant potatoes; and the cost of cultivation is not more than for that crop, whether you have one hill or one acre. A profit can also be realized from it nearly as soon as from any farm crop, for in fifteen or sixteen months from planting, there is a remunerative return. Beside, it stays just where it is set. There are no troublesome runners to be clipped, or unwelcome shoots thrusting up their unwelcome heads a dozen feet from the mother plant, in spite of plow and cultivator. And having produced four or five successive crops from the soil, it shows itself to be a sensible plant by putting on the habiliments of old age, and refusing to bear. You may just plow it up, burn it, prepare and enrich your ground, and reset with new plants.

**SOIL, LOCATION, PLANTING, AND CULTURE.**—It will succeed tolerably well in a variety of soils; but what it especially dislikes, is a hard, dry soil. Good corn land is commonly good raspberry land. It likes best a cool, moist soil, one that is not readily affected by drouth, and that is rich in vegetable matter. A northern and eastern exposure, if protected from the heavy prevailing winds by some screen—as a belt of woods—is preferable. The true time for planting is *early* in the spring. The ground should be fitted during the previous autumn, and as soon as it can be safely worked, set the plants. A smart freeze or two afterward will not injure them. Seven feet by three and a half is a good distance for field culture. The first season they can be cultivated both ways, but afterward they form a hedge one way, keeping down, by their compactness, the weeds underneath, and allowing the cultivator to pass only between the widest rows. Keeping the ground mellow and free from weeds, comprises the whole of the first year's cultivation.

**LAYERING THE PLANTS.**—This is an important operation, and if the right method be not thoroughly understood and practiced, the future results may be disastrous. About the first of September, the plants set in the spring are in condition to layer. On an average, if they are thrifty, each will produce five new plants for next spring's planting. The proper time is shown by the ends of the cane becoming red, hard, and free from leaves. These ends should be inserted in the ground, *in nearly a perpendicular position, and only deep enough to keep the wind from blowing them out.*

A perfect style of plant consists of one bud from the end of the layer, with hundreds of fibrous roots radiating in all directions from it. This is formed by layering as described. An im-

perfect plant may be formed by burying several inches of the layer in a horizontal position. Numerous buds, set close to one another, with different sets of roots, will then spring from it, and you have a plant that, however fair its youth may promise, will never reach a vigorous maturity. On setting the *perfect* plant, it will throw up a single shoot, which will send out numerous branches and yield the first crop of fruit. The second year, several canes will grow from the base of this, furnishing abundant and productive wood for the following crop. But from the *imperfect* plant, the first year a number of weak canes will push up, some of them fruit canes, bearing clusters of berries. They make a feeble growth, for the strength of the plant is divided, and the next year a mass of canes spring from their numerous base buds, which, overtaxing the young plant, prove barren and worthless.

**TRIMMING.**—This when properly done, obviates the use of stakes or other supports for the bearing canes, thus diminishing very materially the cost of producing the fruit. Nothing, however, is required the first year. The second spring the branches should be shortened to two, or at most, two and a half feet in length. It may be done rapidly with a good corn cutter, or a pair of hedge shears. The plant has grown low and trailing, and as you look along the rows, the bushes appear very hedge-like. Perhaps in trimming you have cut away one-third or more of the bearing wood, which seems wasteful.—but, it is well to remember that large and fine crops of bush fruits are surer by an unsparing use of the knife. The remaining buds will start with great vigor, and the first clusters will be large and numerous. If you defer trimming part of your plantation till the leaves have started, that part may ripen its fruit somewhat later, but it may not be quite so fine.

The next operation in trimming should be performed in June. It consists in clipping the tips of the young canes, growing for the next year's crop, (they grow upright,) when they reach the height of two and a half feet. The growth of the plant is thus thrown into the branches, and the main stalk becomes firm and stiff, able to resist the winds and sustain itself in an upright position. The following spring, last year's bearing wood must be cut away, and the branches of the new canes shortened, to give room to the horse and cultivator, and vigor to the remaining buds.

**YIELD OF FRUIT.**—Two thousand quarts per acres is not an uncommon yield for the first crop, I have known them to exceed that by nearly a third, on a patch of an acre. An average yield of three thousand quarts per acres can be attained, by careful selection of plants and good culture.

Fairport, N. Y. 1860.

G. F. WILCOX.

The above is most excellent advice in nearly or quite all respects. The mode of propagating is new to us, as we have let the tips have their own way, or throw a small amount of earth on them. We plant four by six feet,—Ed.



From the Prairie Farmer.

### Horticultural Notes and Items.

**GRAPE GROWING IN IOWA.**—The success which has attended grape growing upon the bluffs and highlands of the upper Mississippi, has established the fact that they are much better adapted to the purpose than our more open and level country, even in much lower latitudes. Being in Lyons a few days since, we visited the grounds of A. A. Truax. They are located a mile from the river upon the west bank, and have a general northern inclination. Six acres are enclosed, and every foot is occupied—principally with grapes. The soil is about twelve to fifteen inches deep underlaid with yellow clay. In the fall of 1859 it was covered with a dense growth of hazel brush. It was trench plowed and thoroughly pulverized and on a portion of it ashes spread. The principal crop of grapes is composed of the Catawba and Isabella, both of which are in a very healthy condition, several hundred of them now fruiting very heavily without any appearance of disease or blight. The Delaware are growing very finely. Mr. Truax is propagating largely from them allowing only a few of them to fruit this year. His success in

#### PROPAGATING BY CUTTINGS

in the open air has been so successful, that we here give his method of procedure as kindly furnished us by himself:

"In the first place I take my Delaware cuttings off in the fall which are cut from thoroughly ripened fruit-wood, after the leaves have dropped, and cut them into length of 3 or 4 eyes, am not particular to an eye, then cut them close under an eye to make them root more readily, then take them and bury them in sand in a cellar where it freezes slightly through winter. I prefer burying them in sand as it helps them callous over through the winter. The first week in May the ground beginning to get warm, I take my cuttings out of the sand in the cellar, the eyes having been kept back by the cold sand and not swelled any. I then take the cuttings which must be kept from the air and not allowed to dry, as that is fatal to them, and put them in trenches which are made as follows: Lay off the ground intended for the cuttings, (I have the ground spaded to the depth of fifteen inches or as deep as the spade can be driven in the ground) the ground is then leveled and trenches are dug 6 inches deep and just the width of the spade; take common coarse sand and fine chip dirt and mix them together and scatter along in the trenches to the depth of two inches. I then take my Delaware cuttings and set them along in the trenches about 6 inches apart in a slanting position, setting them well down in the chip dirt and sand so there will be but one eye above ground when the trench is filled up and leveled off. I then fill in the trench with 3 inches of fine mould and tread the mould to the cuttings gently, then put on the other inch of soil and leave that loose so that the rains and sun can penetrate and act upon the cuttings; this last inch of soil brings the upper eye even with the surface. Then take some short straw and shake it

over them loosely so as to shade the eyes from the sun and drying winds until the eyes start, then remove the straw, weed them out nicely and loosen the surface soils to the depth of an inch and keep it mellow to that depth through the summer. By this plan we don't lose twenty cuttings out of a hundred and should not lose any if the wood was all ripe and all put in the trenches alike trodden and covered evenly.

Delawares raised on this plan make fine plants in the fall. I think the whole secret of raising the Delaware or any other close grained grapevines from cuttings, is having the wood thoroughly ripened, proper care taken of the cuttings after cut, and the preparation of the soil and trenches, where you wish to raise them out of doors. I would say in addition to this my ground all lays to the northeast and my cuttings are all raised on the north side of a six foot fence. I prefer that to any other part of my grounds. The cuttings don't start quite as early but they are more apt to live after they do start, as the soil gets plenty warm enough after the 1st of June and the soil keeps moist through the summer making fine plants by fall.

The Dianas and Concords are flourishing as well as could be desired.

**BLACKBERRIES.**—The New Rochelle or Lawton has fruited fully this season and gave some excellent fruit.

**RASPBERRIES.**—The Purple Canoe has proved all that has been claimed for it, and Mr. T. will extend its cultivation considerably.

**STRAWBERRIES.**—Mr. T., has supplied a good quantity of this fine summer fruit, realizing over \$200 for his crop, at 6 and 8 cents per quart; mostly of the Wilson's Albany. He has a plantation of the Triomphe de Grand from which he has had some fruit; they promise to do well with him and he will extend his grounds.

**PEARS.**—Mr. T.'s trees are in a fine growing condition and are promising well although it has required very close watching and care to check the blight. This he has done by cutting off the affected part fully back of the disease and painting over the wound with white lead and oil. In that way he has saved several that had commenced blighting, and they present a healthy appearance. He practices the same on the apple trees. To shield the trunks of his young pear and apple trees from the scorching of the sun he sews a piece of cotton cloth around them from the ground up to the limbs—on stripping off some that had been on all the season the bark was found to be clean and healthy.

**CELERY.**—The manner of growing celery was to let it grow in the row where transplanted without hilling up at all, only keeping it free from weeds. In the fall it is taken up and packed in a narrow trench dug for the purpose from 18 to 24 inches deep. It should be packed very close and then filled with close manure sufficiently deep to keep out frost; the celery will thus become beautifully blanched and the trench can be opened at one end and a quantity removed at any time for use during the winter.

## The Horticultural Fair.

The Annual Fair of the Illinois Horticultural Society, at Bryan Hall during the past week, has been a complete success so far as the display of fruit, flowers and plants is concerned; but the attendance has not been as large as this splendid exhibition deserved; especially when it is understood that the entire profits derived from the exhibition is contributed to our sick and wounded soldiers. No exhibition of fruit west of the mountains, (if anywhere on this continent) has ever equaled this, and the display of plants, shrubs, and flowers is also very extensive in variety, and many of the varieties exceedingly rare and beautiful.

The view from the gallery into the body of the Hall presents one of the finest rural scenes imaginable. The whole interior is decked with evergreens hanging in graceful festoons, &c. The stand is a miniature grove of evergreen trees, large, tropical, and rare native plants, interspersed here and there with rustic seats and chairs, with an arbor in the background, mantled by the American flag. A circular table some twenty feet in diameter occupies the centre of the Hall covered with bouquets of flowers an innumerable variety of dahlies, roses, verbenas, &c., all surrounding that exquisitely conceived "Temple of Flora," designed by Louis Pantian. In the very extensive collection of H. M. Thompson, of Lake Forest, we noticed the cocoa nut, cinamon, ginger, tea, coffee, sago, date, banana, olive, fig, pomegranite, indiarubber, allspice, black pepper, lemon, lime, orange, pine-apple, and cotton plant—several of them now in bearing. Mr. C. B. McCagy, of North Clark street, exhibits a very rare collection, embracing some thirty varieties of plants from Brazil and the West India Islands. The caruaindica, of the numerous water plants, is the largest, standing some eight feet in height. The stanhapea sigrina (or basket plant) is exceedingly rare and fragrant, and has a sixteenth flowering now for this season, a flag shaped blossom of brilliant colors and delicate tints.

The gallery is entirely devoted to the exhibition of fruits, embracing an extensive assortment of every variety—some of each kind being immense in size, and others of very superior quality. As before stated, this is one of the grandest exhibitions of fruit ever held in this country, and will result in great good, from the mutual interchange of knowledge and experience among the various fruit-growers, and the visible proof of the superior character of our prairie State for fruit growing, will inspire others to embark in horticulture.

We were agreeably surprised to see a very fair representation of the agricultural branch, in the shape of numerous choice samples of vegetables, seeds, grain, &c.

The society deserve the success they are enjoying, and we hope and believe that the Annual Fair of this State Horticultural Society will hereafter stand high among the most important exhibitions of the kind in the country.—*Rail Road Gazette.*

## English, vs. American Strawberries.

*Editor Illinois Farmer, Champaign Illinois:*

FLUSHING N. Y., Oct. 3d, 1862.

DEAR SIR:—I have received the September number of your ILLINOIS FARMER. I notice the Triumph de Gand is miss spelt "grand." It received its name from having been originated at the town of Gand, in Belgium. It has not been installed in the Belgic catalogue for several years, on account of its inferiority in sweetness and perfume, and in Rivers catalogue is only placed among the supernumeraries. I regret to notice that you say "we are out with the big strawberries for home use, but they will do for market for some time yet." As I deem you one of those who seldom make mistakes; but in the present progressive state of the strawberry culture, arrival of new and transcendent varieties, I may say with confidence, the right of which all can attest by a trial, that it is the "big strawberries" of the pine and Chili families, whose delicious sweetness and exquisite perfume, render them preferable for "home use." Both these very large and spirited species are natives of South America, and are found from 4° north of the equator in Surinam, to 57° south in Patagonia, along the straits of Magellan. I find four varieties of these two species in the catalogues issued by my father Wm. Prince in 1790, since which date, thousands of seedling varieties have been produced in our own country—England, France and Belgium; from which above 100 of the finest have been selected and named, and are now under culture in Europe. From all that have been produced, I have selected sixty varieties, which you will find described in the catalogue (48th edition) recently sent you and in the Patent Office Agricultural Report. Touching all seminal reproductions in climates differing from the original and natural ones, it may be taken as an axiom that every plant and every animal partakes, in a degree, of the character of the climate and soil where it is generated. It thence follows, as a consequence that the pine and Chili varieties produced in England, where their seminal reproduction was first commenced, were, by the influence of their mild winter climate; less hardy than the

varieties which have been since produced in northern France, Belgium and Germany.

It resulted as a consequence, that the importation of the English varieties proved a disappointment in regard to their hardihood, as Mr. Hovey of Boston and myself, have so repeatedly announced. About ten years ago, Prof. Westman of this town and myself, commenced growing pine and Chili seedlings, and the same course was adopted in northern France and Belgium, and the result has realized the truth of the scientific fact already alluded to, as we now find these new European varieties to far surpass and supersede the tender English varieties previously introduced, and the American grown varieties to be perfectly acclimated and as hardy as our own native species. Desirous as I have ever been to concentrate within our own country, whatsoever of value other countries presented, I imported last spring fifty-four of the most splendid varieties grown in France and Belgium, and twenty-five plants of each. So delicate a plant is impatient of long transport, and I saved but thirty-six varieties, and in some cases, only ten or twelve plants of each, after paying for many of these select varieties \$6 and \$7 per dozen. The climax of all these varieties is the "Lucas," of which I send you some strong plants.

As soon as I perused your paper, and recalling your liberal and enlightened views, to which I listened when we were on a railroad route together, I determined to send you some of the finest varieties of strawberries for your amusement. I shall comply in accordance and send you to-morrow these select varieties, and accompany them with descriptions of their merits. I consider it of importance to the persons making selections for market culture, or for their own gardens, that they should look to the list of rejected varieties published in the Gardener's Monthly for August last, and I presume the highly intelligent and practical editor, Thomas Mehan, Esq., will furnish other lists of rejected varieties of fruits as a guide to his numerous subscribers. I noticed last year the rejection by the Horticultural Society of Chicago, of "Downer's Prolific." This would seem to be just, although this variety is a great improvement on the wild prairie varieties of Illinois, found by myself and others near Chicago. It is so acidious that it surpasses even the exploded Willson in this respect.

In conclusion, I have only to say, that being on the verge of that bourne which "every traveler may not return as often as he desires to do so,"

I have now and shall always have an abiding interest in the progress of all that appertains to man's eternal destiny.

Yours fraternally,

WM. R. PRINCE.

—We would call especial attention to the above article on the value of varieties, presenting as it does a common sense view of the reason why so many varieties fail to give satisfaction. The new varieties mentioned have come to hand, and we shall give them a trial. They will be kept in the green house during the winter, and we shall thus be enabled to test them at an early day. We have hopes of this class of "big strawberries," but from such as the Willson and Triumph de Gand, we beg leave to be excused. Those wishing to try the new kinds, will do well to send for Prince's Strawberry Catalogue, in which they will find a vast amount of information.—[ED.]

From the Chicago Tribune.

### The Farm and Garden.

*The Crops—Sorghum—Want of Farm Hands—  
The White Willow—It Will make a Fence—  
Where to Plant Potatoes.*

In these times of war and political excitement there is no reliable way to get at the real condition of the crops and progress of farm work but to travel. Taking this hint, we left home on the 8th inst., passed over the Great Western road from Tolono to Decatur, and found, along this central route of the corn zone, this crop in rather a mixed condition. The fields planted early and on dry land, will turn good crops, often sixty to seventy bushels to the acre, while the largest share was planted late, on account of the backward season, and will scarcely average over ten to twenty bushels. On account of the scarcity of labor and the heavy autumn rains, less than the usual amount of winter wheat has been sown. The same remarks hold good in relation to the crops as far north as Mendota. North of Bloomington the farmers sow little winter wheat, but largely of spring wheat. The ground for this must be plowed in the fall, and usually at this season most of the plowing is done. Not so this season, for we only now and then saw a field plowed. The scarcity of labor is again apparent; added to this that more or less time has, and continues to be given to the working up of the sorghum crop, nearly every farmer having from ten to forty loads to haul to

the mill. There can be no doubt that team work has been seriously diminished also, by the large number of horses taken for government purposes.

At Bloomington we were joined by C. D. Wilbur, secretary of the Illinois Natural History Society, and wishing to see a little of the country off from the railroad line, at Mendota, chartered a team for a drive across the country to the Dixon Air Line at Lane. In this drive of thirty miles, we found the corn crop light, and of inferior quality. The spring wheat was badly filled, with many fields not cut at all, and the heavy rains of the past month has done no inconsiderable amount of damage to that in stack, in cases where the farmers were thrashing, the cloud of dust over the machine but too plainly indicated a heavy loss by damp and damaged grain. Here as before, little of the usual fall plowing has been done, the farmers assuring us that if hands cannot be had to drive the teams, they would get contrabands, but these are out of the question as far north as this point. Under this state of things, it is easy to predict that a narrow breadth of spring wheat will be sown in the spring of 1863. Usually a large proportion of the corn stubble can be sown to this grain without re-plowing, but the abundant hay crop, coupled with the scarcity of hands to cut up and shock the corn, together with the weedy condition of the fields, little or nothing can be expected in this direction. The sorghum crop is good, and a large share of the farm force is now busy in securing it. The wooden rollers of last year have pretty generally given place to heavy cast iron ones, and in most cases better pans have been substituted, steam evaporators we notice are more common. We observed several farmers who do not take the Tribune, and these cut the seed heads from the cane and let it stand, rapidly deteriorated. So long as it is left on the stalk, it is a slow circle, but the mains uncut, so long must they remain in a healthy condition. Stripping the leaves arrests the fermentation, so that the

condition ~~THE~~ WHITE WILLOW.

object of the drive over this route was to see the plantations of this willow, that abound in the neighborhood of Willow Creek P. O., and thence to near Lane Station. The first we came to, is that on the farm of the postmaster at Willow Creek, and the oldest in this part of the State.

#### HOW IT CAME HERE.

In the spring of the year 1847, several families moved to this place from near Columbus, Ohio, and one of the members brought with him a willow cane. On arriving it was concluded to make a land mark of this cane, and it was cut into four pieces by our informant, Mr. Blair, who stuck them down in what was supposed the division line of the farms of the new emigrants. Three of them grew, and from them cuttings have been multiplied to that extent that over a hundred miles have been planted for timber belts and for fencing, in the district mentioned.

The first planting of these willows not being on the line, were cut down on the sale of one of the farms to the present owner in the spring of 1853, and the cuttings set out one foot apart for a distance of some twenty rods. The soil is flat just above the overflow of Willow Creek, is dry and rich, and most admirably adapted to the growth of this kind of tree; the result is that it has grown into a most substantial barrier to all horned stock and horses. The sight of this willow belt, now in its full foliage and towering proportions, is one of the most pleasing to the eye of a farmer, whose home is upon the prairie. Here is shade for his stock—a fence that will restrain them—shelter for his crops from high winds, an orchard of rapid growth, and finally rails for ever fences, and fuel for the winter. We have never before this, heard or seen a fence of willow of any practical value; but now the fact stands out in bold relief, the trees that form a solid growth, but sufficiently close to exclude all but moderate sized pigs, calves and to exclude, towering forty feet high, with an inverted base of not less than thirty feet in its cross section, and which would produce nearly or quite a cord of wood to the rod, or about twenty-five poles thirty feet long, with an average of six inches diameter at the base, two feet from the ground. The cost of this was setting the cuttings along side of a post and rail fence, and cultivating them with the plow when the field had its annual seeding of grain. Of course this result surprised all who saw it, for in five years the fence was taken away, and the wall of willows has, since that time, protected that portion of the field. Within the past four years a large number of farmers, probably over 100, have planted cuttings of this willow for fences; over 100 miles of which we saw yesterday. As yet, none of the recent planting will turn stock, but

we see no reason why it will not in two or three years more; and notwithstanding the history of other willows and our own previous expressed opinions, we have the evidence and assurance that this willow will make an efficient fence as above indicated. We also visited an adjoining farm along the bottom lands of this stream, and found a fence of about a quarter of a mile, most of it set seven or eight years ago of this willow, in the unbroken sod land; and these, with the exception of an occasional loss of a cutting, makes a sufficient fence for all stock usually allowed to run out. On the same farm, and in the same connection, is an attempt to use the golden willow for the same purpose, but it is a decided failure. The trees do not grow of a uniform size, and those taking the lead crowding the others out, thus spoiling the symmetry and value of the fence. On the other hand, the white willow has a uniform growth, which prevents one tree from crowding the other out; and growing of uniform size, they soon make such a barrier that no large animal can crowd its way through between the numerous branches that grow up—some upright; others shooting out at angles in all directions—giving space for the growth of the numerous trunks, yet none to spare for the passage way of cattle. This not having been intended for a fence, of course, is not as perfect as those of last planting, which look as though they would answer good a purpose, even against prowling hogs, as the average of osage-hedges.

The supply of cuttings from these trees, should they be used for that purpose is immense, and as they are being sold by the industry seldom equalled, we offer one an words of advice.

The willow is among the first of our forest trees to start in the spring; hence, in all cases where they are to be planted for either fence or for shelter, the land should be prepared this fall, so as to stick out the cuttings so soon as the frost comes out of the ground. In regard to the size of the cuttings, it is not material whether it is a quarter of an inch or an inch in diameter, though the large size is not the best. In setting out, they should be assorted, so to have those of the same size set near each other. We intend, at no distant day, to give more full directions in regard to the culture of this valuable timber tree for the different purposes to which it is applicable. Farmers, in contracting for cuttings; should see that they do so with reliable parties, and not have palmed on to them some spurious variety.

From Lane along the Air Line road the crops are only moderate; in some fields the potatoes are badly rotted, while in others and those mostly on newly broken land, such as old pastures and clover meadows, they are generally sound. This may serve as a hint to prepare the potatoe patch for next year by breaking up a patch at once to be subject to the winter frost.

RURAL.

### Twelve Valuable Strawberries.

We have received the twelve varieties of strawberries from Messrs. Wm. R. Prince & Co., Flushing New York, described by Mr. Prince below. We shall give them a thorough trial, and will report on their merits.

Mr. P. has entered upon the improvement of this valuable summer fruit with great zeal—united to an untiring industry and an intimate knowledge of botany, and his success will doubtless inure to the benefit of the country. Mr. P. sometimes treads on the toes of would-be leaders of strawberry culture, with a boldness that sends them to the wall. Now that the culture of this fruit is being divested of its mystery, we shall hope to see every family in the land enjoying it in abundance, especially every farmers family.

Ed.

Scarlet Magnate, (\*P.) Prince.—Largest and heaviest of all the North American varieties yet produced; of distinct form; rounded oblate; very solid; suitable for carriage; bright scarlet; very showy; juicy; sweet; fine flavor; very productive; the most splendid of all market berries, and suitable for the main or middle crop between the earlier and later varieties; plant very strong, vigorous and exceedingly hardy.

of the (H.) Prince.—A seedling of the above in sexuality, like form and quality, but varying Magnate. Like form and quality, but varying vigorous and product, suitable to fertilize the

Sempronia, (H.) Prince.—the plant is strong cone; bright deep scarlet; fleshy good flavor; a remarkable berry; plant diffuse rous; broad foliage; productive. A spic. seedling of the Hovey; differing in sexuality.

Diadem, (P.) Prince.—An admirable seedling of the Iowa family; very large; rounded; light scarlet; remarkably beautiful; pleasant flavor

\* (H.) denotes the Hermaphorodites, (P.) the Pistillates.



suitable for all purposes; plant very vigorous, hardy and exceedingly productive. This and many other Pistillates produce fifty per cent more per acre than the Willson, and three times as many bushels as the Triumph de Gand.

Lucas (H.) De Jonghe.—The most admirable berry yet produced in Belgium, the climax of the Pine family; a seedling of and superior to "La Constante." Berry very large; beautiful; oval or round form; glossy crimson; flesh rosy white; very firm, juicy, sweet; extremely rich flavor; plant very hardy, vigorous and productive.

Vicomtesse Hericart, (H.) Jamin.—Large, round or compressed; bright scarlet; flesh firm, white, sweet, perfumed; plant hardy and vigorous.

Ladies Favorite, (P.) Read.—Moderate size; pale scarlet; round; very sweet; exquisite aromatic flavor; plant very hardy; originated in Upper Canada. Ladies' Aromatic is an enlarged seedling of the above—quite new, and not yet sufficiently increased for dissemination.

Le Baron Pine, (H.) Prince.—Very large; obtuse cone; crimson; sweet, juicy, delicious; possessing the highest flavor of any of the large American varieties, except the newly acquired "Eureka," now deemed the climax in flavor and perfume. This plant is very hardy and vigorous, with deep green foliage,

Belle Bordelaise Hautbois, (H.)—An admired representative of this family, which is in Europe, entitled, "The Strawberry of the true Amateurs." It is the earliest of its class of incomparable productiveness; medium size; conical; dull, brownish red; peculiar and attractive; rich, musky flavor; preferred by many over all other families; plant exceedingly vigorous; one of the most hardy. If fully irrigated, it will produce an autumnal crop.

Green Pineapple, (H.)—Berry of medium size; greenish; tinged with red; juicy; rich, musky, pineapple flavor, and highly esteemed; the trusses at the period of bloom, rise high above the foliage, but being flexible, they—as the berries enlarge—sink beneath the foliage, and at their maturity none are visible. It ripens late; and is a peculiar and interesting variety—belonging to the Cottina family. The Bargemon and Green Alpine, are of the same species.

Prince's Large Climax, (P.)—A new and admirable variety. Large; obtuse cone; bright scarlet; firm, sweet, juicy; fine flavor; a splendid

family market berry; plant vigorous, hardy, and very productive. This is yet rare, and the variety that is sold by some nurseries is our old Climax Iowa; very inferior to the present variety.

La Constante De Longhe, (H.)—This magnificent variety of the Pine family, is only equalled by the "Lucas." Berry perfect in all respects; beautiful, regular cone; brilliant, glossy scarlet; flesh rosy white; solid; firm; sweet; high flavored; exquisite; ripens late; plant dwarf, vigorous; very productive; forces well; succeeds in all situations.

NOTE.—I wish here to simply remark as regards transplanting, that we here continue our planting until the ground freezes—near Christmas, and we find the latest plantings as successful as the earliest. The Pines and the Chili varieties require a moist soil. Yet it must not be sodden, but a soil with ample drainage. All the North American and European species, with their varieties will succeed on any good garden soil, but will produce the greatest crops on a soil retentive of moisture.

WM. R. PRINCE.

WHAT A COW HAS DONE FOR THE WAR.—The Albany Journal relates the following interesting incident, which, it truly says, should make some of the rich men blush who are subscribing their paltry fives and tens to the recruiting funds of their several localities:—

"A few days since, subscriptions were set on foot in Orleans county. A farmer of moderate means contributed \$50 and a cow. Every one concluded that this was liberal; but it occurred to a friend that the cow might be turned to excellent account. Lots were to be cast for her, and 205 tickets, at \$1 each, were distributed and paid for. This, practically brought up the farmer's subscription to \$255. But the cow was destined to do still better. The winner put her up at auction, and \$30 more were added to the fund—making the aggregate \$285. But it was deemed a pity that a cow, so thoroughly patriotic should be sold so cheap; and the result was that \$15 were added to the purchase money—making the cow's aggregate contribution to the fund \$250, besides the \$50 from the original owner! There are a great many rich men, all over the country, who will not do half as much for the war as this cow."

Bob, is that dog a hunter? No, he is a half-hunter and half-setter; he hunts bones when he is hungry, and sets by the fire when he is satisfied.

To evade being drafted—enlist.

[From the London Athenaeum.]

**Autumn.**

Now sheaves are slanted to the sun  
Amid the golden meadows.  
And little sun-tanned gleaners run  
To cool them in their shadows;  
The reaper blnds the bearded ear;  
And gathers in the golden year;  
And where the sheaves are glancing,  
The farmer's heart is dancing.

There pours a glory on the land,  
Flashed down from Heaven's wide portals,  
As Labor's hand grasps Beauty's hand  
To vow good will to mortals;  
The golden year brings beauty down,  
To bless her with a marriage crown,  
While labor rises, gleaming  
Her blessings and their meaning.

The work is done, the end is near,  
Beat, Heart, to flute and tabor,  
For Beauty wedded to the Year  
Completes hers: If from labor,  
She dons her marriage gems, and then  
She casts them off as gifts to men,  
And, sunbeam-like, if dimmer,  
The fallen jewels glimmer.


There is a hush of joy and love  
Now given hands have crowned us;  
There is a heaven up above,  
And a heaven here around us!  
And Hope, her prophecies complete,  
Creeps up to pray at Beauty's feet,  
While with a thousand voices  
The perfect earth rejoices.

When to the autumn Heaven here  
Its sister is replying,  
'Tis sweet to think our golden year,  
Fulfills itself in dying!  
That we shall find, poor things of breath,  
Our own Soul's loveliness in death,  
And leave, when God shall find us,  
Our gathered gems behind us.

**BOILED OKRA.**—This vegetable, which is also a great favorite with us, we prepare in the following manner:—

In removing the okra from the stalk, it should not be cut too closely to the plant, as the juice will escape, and destroy the muculent quality of the plant. After throwing the okra into boiling water, add salt and a very little saleratus. Boil rapidly for fifteen to twenty minutes, according to the age of the vegetable, and when cooked it should be immediately removed from the water. It should be cooked in an earthen vessel or one lined with china, as tin will discolor it. Season as desired.—*Gemantown Telegraph.*

**CEMENT FOR MENDING STEAM BOILERS.**—Mix two parts of finely powdered litharge with one part of very fine sand, and one part of quicklime which has been allowed to slack spontaneously by exposure to the air. This mixture may be kept for any length of time without injury. In using it a portion is mixed into paste with linseed oil, or still better, boiled linseed oil. In this state it must be quickly applied as it soon becomes hard.

 To become a great man, you must study great men. A horse that lives on hay could not get up an oat trot, if it were to save his life. It is by coming in contact with magnets that magnets are made.

**A Day about the Gardens of Chicago.**

A few evenings since found us on the train bound in the direction of Milwaukee, of course provided with that most indispensable commodity to all editors, a pass from our good friend Superintendent Baldwin. By the way why do not all railroad superintendents have a suburban home, as well as Superintendent Baldwin. It would be a sort of connecting link between them and the great public—something that would keep them pleased with themselves and the rest of mankind. All of you superintendents who board out, or keep house in crowded streets, please to take a ride to Waukegan and see how a man may live and enjoy himself, and yet be a railroad superintendent. We know of one or two who would be vastly benefitted in this way. The country air, fresh vegetables, ripe fruit and beautiful flowers, would soon neutralize the vinegar in their composition, and they would see their great array of patrons through a different medium than the one their distorted visions now present. Every man who pays for his ride, is not, you see, a swindler. Every editor who gives up his columns to defend reckless engineers and stupid managers, might be snubbed and their passes cut off, but it would be hardly fair and less polite to snub all alike. Take a taste of the country, gentlemen, and fit yourselves to ride to heaven with common people, if not to enjoy the good things of this life.

We are ahead of time—just enough to see this is the evening train for the suburban towns that grace the Lake Shore, Rosehill, Oakton, Evanston, Winetka, etc. The business men of this city are crowding the coaches, ladies with their shopping parcels, and nearly every one with something to take home. Who that spends the busy day amidst the dust, the turmoil, the rattling of wagons and drays of the great city, would not wish to live on the lake shore, where the whispering waves and beautiful surroundings make amends for the days trial.

We stop at Oakton, and across the fields half a mile to the beautiful grounds of our friend J. C. Ure, the pioneer of cold graperies in the west. His grounds are yet new, and his time too fully absorbed with the public grounds of Chicago to make them what his interests demand; but the growth of everything is of the most satisfactory kind, and his green-house plants are unequalled. This is not on account of any extra care; on the contrary, no plant-house has had so little attention as his. The vigorous growth and good

health of the plants, is due to the form of the house, which in this respect is not only the best but the cheapest that we have seen, and so well are we pleased with it, that we are putting up one on the same plan—sixteen by fifty-four feet. No plant is scorched, nor is there any need for the use of white-wash. The ventilation is the most perfect and convenient to regulate. There is no loss of heat, and no danger if the house is neglected for a day or two on account of watering. Cuttings were making good roots in common potting earth, in the shade of the grape vines loaded with fruit on plants grown in boxes under each rafter. On the whole, it is the most cosy and perfect of the whole family of propagating houses within our knowledge. As it is the design of the publishers to make some improvements in the next volume of the FARMER, we propose giving a drawing and description of this house.

Mr. U. has a lean-to well stocked with plants, and the rafters loaded with cluster of grapes, grown in boxes. This is the last of the lean-tos, as they are of little value compared with the double roof on the new plan.

The land here is in sandy ridges, divided by narrow slues of muck resting on quick-sand. These have been drained and supply the best ground for the strawberry, making a deep, rich moist soil—never too dry and in no danger of flooding, as the water is drained off through the peat-like soil.

Mr. U. has manured his place—Grapeton—and intends that it shall be what its name implies. The ridges make a good growth of vines when treated to waste from the lard and button makers. Next year he will commence his system of cold graperies.

Early in the morning we rode to Evanston, some three miles distant. We have never admired this place for its style of building and grand improvement, though there are some good places in it, at the head of which stands that of Mr. Hurd. West of the depot and next in order is that of Gov. Evans, near the lake shore. The wide swales yet undrained, tend to mar the beauty of the place, but in time these will disappear, and Evanston become a desirable place; as it now stands, it has the appearance of having been overdone with great expectations. Near the upper part of the town is the new cold graperies of Mr. E. Haskins, the most complete of any yet erected in or about Chicago. Mr. Ure who superintended its construction, has promised us a drawing and description for the FARMER. It was erected and the vines planted last spring,

and at this time, many of them are three-fourths of an inch in diameter and twenty feet long. It is a span roof, and of course easily cared for. Any person seeing this would never put up a lean to.

From here we visited the grounds of Messrs. Kidder & Knox, the small fruit growers of this section. We believe that it has been a favorite theory with Mr. Knox to plant the strawberry on dry ground, such as is suited to wheat and corn, but here on their dry sand and gravel ridge the plants after three years trial have been voted a failure, and seven acres of Willson's Albany have, within a few weeks, been turned under. Much to our regret, Mr. Kidder was not at home, being absent in raising a company of cavalry for the war. Mr. K. has removed his strawberry plantation to the low lands bordering the swales, and they promise well. The Triumph de Gand look very vigorous and promise to show good returns next year. Thus far the strawberry crop on these grounds have proved a failure. To the west of the ridge on the flats some thirty acres have been tile-drained at a large expense, and several acres set in small fruits, but from several causes have not done well. The upper soil is peaty, while the subsoil is of cemented clay and gravel, and we doubt if this could be put to better use than to be set in meadows for at least the next dozen years. For small fruits at present it is doubtless a failure. The Lawton blackberry had on samples of ripe and green fruit September 17th. The Black Cap raspberry had made a good growth as well as Brinkle's Orange.

We confess to no great disappointment from what we saw of the place two years since, and predicted the result that has followed. It will not do to put strawberry plantations on very dry land, nor will it pay for small fruits on flat, marshy clays, however well drained, the soil is too dead and cold for such use, grass appears the only profitable crop. However successful Mr. Knox may have been at Pittsburgh, he has been disappointed him.

We next turned cityward, and our first call was at Rose Hill cemetery, the grounds of which are of the best description of land for this purpose, being a broad, gravelly ridge, sparsely covered with yellow oak and hickory. The grounds are well laid out and kept in good order. Rose Hill will be to Chicago what Mount Auburn is to Boston, one of the beautiful spots hallowed as God's acre.

From Rose Hill is a fine gravel road to the

city some six miles—we pass Graceland Cemetery but have only time to call at the Graceland Nurseries of F. Sulzur, where we found a fine stock of plants, particularly of choice well grown roses and bulbous plants—in this last we saw some of the largest and best grown that have come under our observation, approaching nearer to the Dutch bulbs than any we have seen.

### The Best Varieties for Orchards.

LOCKPORT, Oct. 3, 1862.

M. L. DUNLAP, Esq., Dear Sir:—My two sons are propagating apple and pear trees with a view to setting out a large orchard upon the high, rolling timbered lands in the South part of your State, or upon the same kind of land in Missouri, looking upon St. Louis as the principal market. And noticing a list of apples given by you in the Country Gentleman of Sept. 25, part of communication from you to Col. Wilder of Sept. 4, I have taken the liberty of writing to you and of asking you if you would do me the favor of sending me a list of apples and pears which you would recommend for the locality I have named, having reference to the market of St. Louis principally, and to an orchard for profit only. My sons now intend to plant more pears than apples, believing they will be more profitable notwithstanding the blight. They intend to make this a business for life, and I am anxious they start as near right as possible, therefore I am gathering up all the information I derive from the experience of others. They intend, in the end, to set at least forty acres of pears, but come up to that point gradually, as they gain knowledge from their own and the experience of others. When I have perfected a list which I intend to do as far as practicable by the first of May next, I intend to publish it for the benefit of others. Will you, in making out a list, if you make one, give the names of the varieties, and the number of each variety in 1000 trees for an orchard for market only, and for profit. Will you also make a list of those that are most liable to blight, and of those least liable. I shall be happy at any time to reciprocate the favor in any way possible, and will esteem it a favor if you will command me at any time.

I have had this enterprise under contemplation for some years, and in 1858 and 1859. I spent some nine months in traveling through the southern half of your State and in Missouri. During that time I gathered all the information

upon the subject that I could. But so few pears had been planted, and those for so short a time, that but little could be learned.

At Alton the pear had suffered much from blight, and planters were quite discouraged. In other localities, the loss had been none or but trifling.

I am inclined to think that on the high rolling timber lands of the locality I have mentioned, pears can be cultivated as successfully as they can be here or around Boston.

Yours respectfully,

M. L. BURRELL.

—We have numerous letters of inquiry similar to the above, and can only answer them through the FARMER, as our time will not permit of personal replies. This number gives our views in general, and the report of the State Horticultural Society will also furnish much valuable information on setting a pear orchard. We should place Flemish Beauty at the head of the list, Bartlett, White Doyenne, Doyenne de Eta for very early, Stevens' Genesee, Onondaga, L. B. de Jersey and Winter Nellis are all good sorts. Madaline has thus far, with us, done well. Buffum is too small and too tardy coming into bearing. Most of our time has been fooled away in looking after the new pears, but now planters begin to inquire for profitable orchard sorts, that is, sorts that are hardy, saleable, and of course profitable. Doubtless many others will prove valuable, but as at present advised we should plant standards of 100 Bartlett, 500 Flemish Beauty, 100 Genesee, 200 White Doyenne, 100 Winter Nellis in an orchard of a thousand trees for market. I would have these all head at the ground, none of them with trunks a foot high.

For apples for the St. Louis market, I would plant summer and autumn fruit, as the market for these is but poorly supplied. Keswick Codlin, Red June, White June, Duchess of Aldenburgh, Maiden's Blush, Holland Pippin and a few others.

The lands along the Iron Mountain railroad, are the most valuable for the St. Louis market. For pears we should keep off the river bluff for fear of the blight.

Ed.

My German friend, how long have you been married?

Vell dat ish a ting vat I don't likes for to be sprachin' bout, but ven I does, it seems to me 'bout so long as never vas.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, OCTOBER, 1862.

### Editor's Table.

OCTOBER, with her coronal of ripened fruits, is again at hand, blithe, jocund October, full of activity, the garnering up of nuts, of fruits and of vegetables; the busy days of preparation for winter. We look back through the records of summer to the planting of spring, and now realize all that the season and our labor and skill have yielded. Those of us left to till the soil, have no small task; every hour must find us busy with the autumn harvest and the preparation for winter. No one can now be idle.

The war has drawn so largely from our farming population that it will, with our best efforts, be impossible to secure all our crops; but we must begin early and work late and work to advantage. We cannot afford to throw away any labor in the wrong direction, but it must be applied judiciously. Harvest the potatoes before frost and when the ground is dry and in good condition; have the corn cut at once, all that is intended for feeding. When the fodder is not to be used, it is the cheapest to husk on the hill, and haul in bulk to the cribs. See that the cribs are well covered, as the losses of the last season from this cause are too large to be overlooked. The price of rejected has a wide margin attached to it. The potatoe crop is light and therefore needs the better looking to. Sorting them at the time of digging is but little trouble and will save a large amount of labor—put the kinds separate and also sort out the small ones. You can never do this work so well as at the time of digging nor one-fourth as cheap.

Manure should be hauled out on the meadow, where it has not been done, and have the yards clear for the new supply.

Those who have not given fall plowing a fair trial should do so at once and they will be pleased with it, as well as find it a great saving of labor.

STATE HORT. FAIR AND THE I. C. R. R.—We have numerous letters of complaint in regard to this road not extending half fare tickets to parties wishing to attend, but but who, in consequence, did not attend. The attendance was small from this line of road, but if fares had been free, we do not think it would have been larger. The truth is, people could not find time to attend, to say nothing of the cost. We could have wished that return passes could have been given to those in attendance, but to say that the Illinois Central Railroad have done nothing, is wrong; they gave material aid in the way of freight and passes to get up the show and to those whose time was spent in making up collections so far as asked, and so soon as the officers are satisfied that a good attendance for these pains can be had from the line of road, we have no doubt they will grant the same facilities that other roads have done. Several things can be said on both sides of this question.

We think that unless the roads can all grant half fares it is useless to attempt to hold a fair at any point. People will not attend unless they can have a reduction from the usual rates. Railroad men can see this as well as we, and will be very apt to work for their own interest. It is true that an old fogey will occasionally get into office on these roads, but their rule is generally short and they die an easy death. The State Horticultural Society is now a live institution as it has demonstrated that it can hold a fair on its own merits, and will of course no longer play second fiddle to any one. It will of course be respected accordingly and be a party to contract and to be contracted with.

THE PULU FOR MATRESSES.—In No. 5, of the current volume of the Scientific American, I notice you have copied from the New Bedford Mercury an item on the business of the Sandwich Islands, in which the writer speaks of pulu as being a kind of brown thistle down. I have been a resident of the Sandwich Islands for several years, and know this to be an error. Pulu is gathered in great abundance, principally on the island of Hawaii, the largest of the group. It grows on the stalk or in the crotch of a species of fern. This fern often grows to the height of ten or twelve feet and has a body of from two to



eight inches in diameter. I have ridden through vast fields of this species of fern in the vicinity of the volcano Kilanea, that extended as far as the eye could see. On the edges of these fields nearest the volcanoes the lava has flowed and covered large tracks, forming plateaus upon which the natives have built pleasant hamlets, and are carrying on a lucrative business in gathering and drying the pulu for shipment to San Francisco, where it is extensively used for filling mattresses. From a single fern they gather a tuft about the size of a man's hand and spread it on the grass and lava banks, where it is thoroughly dried, then bagged and transferred on the backs of mules to the sea coast. There it is pressed in bales for shipment like cotton. Pulu and sugar are the principal exports from the Islands to California. Of rice there is scarcely enough raised to speak of, while extensive sugar plantations are becoming numerous, and a better quality of crude sugar cannot be produced elsewhere. Reported experiments have been made in some localities for producing cotton, but have failed, perhaps for the want of knowledge of the proper method of cultivation.—*Cor. Scientific American.*

**LAND ROLLERS.**—*Ed. Ill. Farmer:* I see a statement in your paper that is not correct in regard to land rollers. You say you think the parties are not making any more of the kind you have. Well, we are able to fill all orders for land rollers, same as we made for you, and of any required length, at a fair price, if gentlemen will just send in their orders. We make none unless ordered, as farmers are not, as yet, enough interested in land rollers to support the trade, so send in your orders. J. C. CARR.

Morris, Illinois.

It is a matter of astonishment to us that farmers do not make more use of the roller, we would as soon think of keeping house without a stove as to farm without a roller. We give the farmers the benefit of the above information without charge, and hope they will patronise Mr. C. sufficiently to enable him to advertise his very superior rollers and to keep a good stock on hand, they must be put in use next spring for planting corn as we have before intimated.

**STATE HORT. FAIR.**—This has been a success so far as a large show of fruits and flowers, and a small show of vegetables are concerned. The extended notice of it will well repay a perusal.

**THE GARDENERS MONTHLY.**—This sterling work continues to flourish, notwithstanding the war, steadily increasing its circulation. The truth is,

we were just entering upon a new era of gardening, fruit growing, and ornamental work on both farm and village plots, which the war has checked but has not wiped out. Few, if any of the thrifty agricultural and horticultural journals have failed to pay, while several of them—like the two preceding—have increased their circulation. Those which have catered to the war news—to save them—have generally gone under. The American Farmer took a stand for Dixie, and was the first victim to its own traitorous disposition.

**THE HORTICULURIST.**—This valuable work is on the high road to prosperity. The editors are practical men and know what is wanted by the great mass of small cultivators, have a large increase in its circulation. With the exception of the January number of the current volume, we have the set complete, making the seventeenth volume. Some one of our readers who may have an odd number for January, and will exchange it for a years subscription to the ILLINOIS FARMER, will please inform us. For the Horticultural address—Mead & Woodward, New York City, \$2.00.

**STRIPPING SORGHUM.**—Sorghum should be stripped of its leaves a few days before cutting. Do not cut off the heads until you cut up for grinding. When the cane stands up, a three-tined fork is a good implement, but when it is down, as much of it is this season, it is best stripped by hand, using a pair of buckskin gloves in the operation.

**ILLINOIS TEACHER.**—Mr. Gow, the editor, has taken charge of the public schools at Rock Island where he should be addressed.

The Teacher, in the hands of Mr. G. has become a valuable journal in its special department, and should have a wide circulation in the State.

**BRNEVOLENT WAR CLAIM ASSOCIATION.**—We have the circular of this enterprise with a request to publish entire, but for this we have not the space. The association proposes to attend to all war claims at the cost of doing the business, and from the names connected with the enterprise, we think they will.

Any of our readers wishing to consult them, will address C. A. Gregory, Post Office box 163, Chicago Illinois.

**THE CROPS.**—The crops of wheat at the north part of the State is very light—much less than was anticipated before threshing. In many cases it does but little more than double the seed sown. Corn will average lighter than last year, except in the south part of the State where the crop is the best for some years. Barley is a fair crop; oats light. Rye fair, and potatoes will be a very short crop in all parts of the State. The fruit crop will average a good one, and command a round price.

**ILLINOIS RAILROAD LANDS.**—We have on our table a pamphlet of sixty pages, describing these lands,—among them some of the best fruit and farming lands in the State. Those wishing this pamphlet to send their friends, should send their address to the commissioner of land department, Illinois Central Railroad Company, Chicago Ills., and they will be mailed direct from that office.

**HUSKING PINS.**—In our advertising columns will be found the whereabouts of this indispensable luxury—the husker. We have given this a fair trial the past season, and found it not only a pleasant, but a profitable thing to use. Their cost at retail is about fifty cents a dozen, the cost of which is more than saved in a days use.

**WHITE WILLOW.**—We call especial attention to the card of O. B. Galusha, President of the Illinois State Horticultural Society. Persons desiring those willow cuttings, will notice the extremely low price at which Mr. G. offers them. We know from a pretty full personal inspection, that the demand for those cuttings is fully equal to the supply, if not in excess; and we, therefore, gently hint, that those who wish to avail themselves of the rates offered by Mr. G., to make no delay.

The stock of trees and plants offered by Mr. G. are both well grown and select in variety, and his prices are beyond competition.

**COTTON LANDS TO RENT.**—Probably the first advertisement of cotton lands to rent in the State, are those of the Messrs. Stewart, in this number of the FARMER. The lands are in the south part of the State, on the Mississippi river, and among the most valuable in the State. We have before us samples of cotton of this years' growth of the best quality, two pickings of which have yielded near three hundred pounds to the acre; and it is probable that as much more will be secured. We have no doubt of the value of these lands for cotton culture, and at the price at which cotton must rule during the next five

years, a fortune must be made. Along acquaintance with the junior member of the firm, enables us to assure any person who may wish to contract with them, that they will be found gentlemen in all respects.

—We have seen a statement of the official trial in one of the principal counties in this state, of twenty five grain and stock scales. They were the ordinary out-door wagon scales, and were tested just as they were found in common use, thus making it one of the best practical tests. Sixteen of them were of Fairbanks' make, and nine of various other kinds. The result showed a remarkable degree of accuracy in those of Fairbanks' make, while all the others were condemned as not sufficiently accurate for use. The importance of this fact will be appreciated without comment. We publish it because it is one in which the public are interested. —Chicago Tribune.

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### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin *now*, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

 Correspondents will please be particular to give the name of the post office, county and State.

 Specimen numbers will be sent gratis, upon application

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Springfield, Illinois.

**SPECIAL NOTICE.**—For terms see prospectus on last page. All exchanges and communications for the eye of the editor should be directed to ILLINOIS FARMER, Champaign, Ill. Electrotypes and business matters, and subscriptions, to the publishers, Springfield, Ill. Implements and models for examination should be sent to the editor. The editor will, so far as it can be done personally test and examine all new machines and improvements submitted to his inspection. He will be found at home, on his farm, nearly all of the time. So far as it is possible the conductors on the I. C. R. R. will let off passengers at his place, which is directly on the road, three and a half miles south of the Urbana station, now the city of Champaign.

tf

# THE ILLINOIS FARMER:

A MONTHLY JOURNAL OF

## AGRICULTURE AND HORTICULTURE.

IS PUBLISHED AT SPRINGFIELD, ILLS.,

BY BAILHACHE & BAKER,

AND IS

EDITED BY M. L. DUNLAP,

(THE "RURAL" OF THE CHICAGO TRIBUNE.)

**TERMS IN ADVANCE.**—\$1 a year; two copies 1 50; five copies \$3; ten copies \$6, and one to getter up of the club twenty copies \$10.

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All business letters are to be directed to the publishers, Springfield.

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Card of five lines one year.....				\$7 00

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All worthy objects advertised, and those of importance to the Farmer will receive, from time to time, such editorial notices as the Editor may consider them worthy of, without additional charge.

Implements and seeds to be tested should be sent direct to the Editor, at his residence, Champaign.

We have put the price of advertising within reach of all. It will enable those who like to freely advertise their goods to do so at a cheap rate,

Terms, cash. Yearly advertisers will pay semi-annually and all transient advertisements must be accompanied with the cash to insure insertion.

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PRICED CATALOGUES, which are sent to purchasers of trees, and to applicants who inclose stamps.

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Every one is aware that the twisting and wringing of clothes by hand, stretches and breaks the fibres; but this machine presses them so even, between two rubber rollers, that a newspaper thoroughly soaked can be wrung without breaking it in the least. Buttons, hooks and eyes, &c., are not injured by it.

In starching it is invaluable, especially on large articles, such as ladies' skirts, &c., as it leaves the starch perfectly even. It will wring a bed quilt or a pocket-handkerchief drier than it can be done by hand, and the most ignorant servant can use it. It can be screwed on to any tub, and only weighs ten pounds. Every housekeeper should send for one and try it. If it does not give entire satisfaction, it may be returned and the money will be refunded.

For sale, wholesale and retail, by

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73 Lake street, Chicago, Ill.

P. O. Box 3047.

Agents wanted in every town.

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Late of Com; Gen.'s Office,  
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Having had much experience in prosecuting claim against the United States, particular attention is given to Recruiting Bills made by officers and men or volunteer companies and regiments, for subsisting and, collecting, organizing and transporting passed prior to muster into service: Back Pay due Resigned Officers; Back Pay due Discharged Soldiers; Pay due Deceased Officers, their Widows or Heirs; Bounty and Pay due Heirs of Deceased Soldiers; Pensions due Deceased Soldiers' Widows and Minor Heirs; Pensions due Invalid Soldiers; Pay for Horses lost, killed or died in the United States' service; All Claims growing out of the Present War.

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August, 1862. tf



GIN AS A REMEDIAL AGENT.

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The undersigned has 500 acres of the best cotton lands in the State, under a good state of culture and well inclosed, which they propose to lease for a term of years from one to five.

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The renter will keep in good repair all fences, and will pay as rent one-fifth the crop if of cotton, if corn ten bushels per acre, if wheat one-third of the crop, the renter finding seed and deliver the rent in warehouse on the premises.

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## PROSPECTUS FOR THE

JOURNAL OF THE  
Illinois State Agricultural Society.

The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

AGRICULTURE IN ALL ITS BRANCHES,  
Mechanics and Natural History, as may require early publication.

All premiums offered and awards made by the State Society will appear in its columns.

All persons, and especially Secretaries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

To place the Journal within the reach of all, the subscription price has been fixed at

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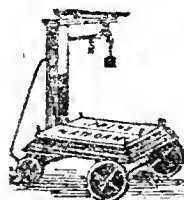
Barely sufficient to cover cost of publication, payable invariably in advance.

Back numbers for the current year will be furnished until the edition is exhausted.

All subscriptions and communications may be forwarded to the undersigned, Springfield, Ills.

JOHN P. REYNOLDS,

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O. B. GALUSHA.

Lisbon Ills. Oct. 1st, 1862.

Oct 6m.

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Apples, five to eight feet, Leading Western Sort

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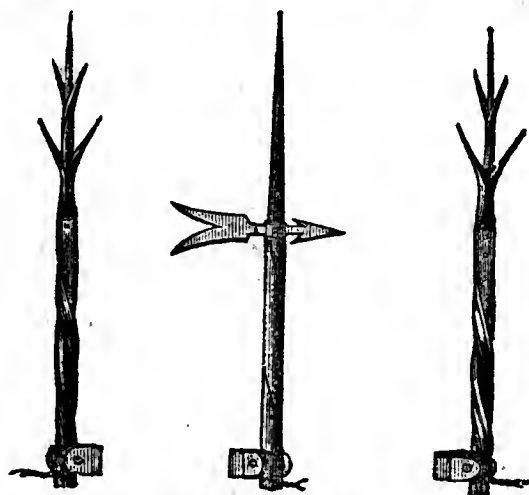
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, NOV., 1862.

NO. 14.

## November.

The November winds are busy with the leaves that summer has passed over to the keeping of autumn, a donation with which to mulch the roots of her forests, her orchards, and to protect the tender plants of her lawns—a wise and prudent provision of nature to guard against the winter frost, and to furnish a rich and valuable fertilizer to the soil.

Just now, before the corn husking commences, is the time to set out the orchard and to prepare the garden.

Manure should be hauled out to the meadow and spread out evenly over its surface. This we have recommended to be done immediately after haying, but when that has been neglected, now is the time. Orchards should be top-dressed in the same way. Ten acres of orchard thoroughly cultivated is worth three times that amount not attended to.

The White or Timber Willow is becoming a mania, both for fencing, fuel, shelter and shade. If you want to make a fence of it, prepare the ground this fall, as the cuttings must be put out as soon as the frost is out of the ground. To a great extent, this tree will supercede the use of Osage for fencing.

Bury your cabbage heads down, in a dry place. Beets should be placed in pits out of doors, but well secured from frost. Sugar beets are valuable for milch cows as well as those fattening. Do not forget to send samples to the Sugar Refinery for trial.

Don't allow your stock to stand out in the cold autumn storms, but put them under some kind of shelter. A cold storm is

worse on stock than the coldest weather of winter.

Do all the fall plowing possible; it will be so much ready for spring. Land for spring wheat *must* be fall plowed. Cotton and tobacco are to be the new things for the producer next season. Fit your lands for them by fall plowing, and hauling out manure.

Great political changes make great changes in the products of the country. In our case, cotton is to become the great staple of the south part of this State; and tobacco, throughout its whole extent, will soon be among the most prominent. Wheat will be more largely grown, and corn take a less prominent position. The reopening of the Mississippi, which will soon occur, will give such an impetus to the agriculture of the west, that old pioneers will be astonished. The eastern railroads will no longer hold the monopoly of the carrying trade, and prices must advance in proportion to a decline in freights, which, at this time are almost ruinous to western produce. Let us, by all means, hasten the day when our great western staples shall again find an outlet to the ocean by the way of the Father of Waters.

## A Chapter on the Potatoe.

The potatoe harvest is now nearly over, and we can sum up the season's yield. In the south part of the State it is nearly a total failure; in the central part below a medium crop, and in the north about a fourth of the usual yield. The rot has made bad work at the north, and done considerable damage in the center of the State; while

the dry period during August and September, through the basin of Egypt was most disastrous. Minnesota, Wisconsin, Michigan and Northern Indiana can usually supply any deficiency in our markets. Of the crop in those States we know little, but presume they are not over abundant. At this season of the year potatoes are generally sold in the Chicago market at 16 and 20 cts., but this year the range is 35 to 40 cts., thus showing that the supply is not large. When the crop is good farmers within teaming distance of Chicago usually market large quantities of potatoes directly from the field, and those are either stored or shipped south.

Last year the crop at the south part of the State was unusually good, and of course no demand from that quarter—not even the usual supply of seed potatoes.

#### SOIL AND CULTURE.

A deep, rich, loamy soil is the best for the potatoe; hence all of our dark colored prairie soils are adapted to it; especially those of the northern and central part of the State, and the Mississippi and Ohio river bottoms; though on these latter the product is coarse, watery and will not keep well, soon becoming tough, leathery and unpalatable. South of Pana and Neoga, on the light colored clay soil of Egypt, the potatoe, at best, is but an indifferent grower, and usually of poor quality. In that part of the state the season is favorable to this crop, when cultivated in the usual mode and planted at the usual season. There the growing season is during the spring and autumn rains, the summer being subject to long continued drouths. Added to this is the well established fact that often planting the seed grown on the same farm year after year, the crop deteriorates and seed must again come from the north; in fact, it is well settled that it is not safe to plant the second time from home grown seed. This peculiarity cannot well be avoided; and hence, for all time, large quantities of potatoes must come from the north for seed—on an average a full re-

newal every second year, an amount equal to half the seed used. We say this is what will be found profitable, but we do not suppose that it will be so generally observed as its profit demands.

This is no idle theory, but a well settled principle, and those who observe it can grow fair crops of very good quality.

In that part of the state two seasons are fixed upon for planting, one early and one late. The early planting is ripe in July, while the other is dependent on the rains of the last of September and first of October; of course, this planting is a mere lottery, while the first planting is much more certain, and in this it is found the earlier the better. In all cases sod land that has had one crop of small grain taken from it should be selected, for such a soil is more retentive of moisture than old land, whose texture is wanting in the decaying roots of the grasses.

We would recommend that the land for the next year's crop, in that part of the State be plowed before winter; by throwing it into narrow lands the water will drain off and it will be in good condition to plant very early. It need not be plowed again in the spring. In planting, mark out the rows with a shovel plow, two and a half feet apart, and four or five inches deep; in these drop the seed, one to two eyes on a piece, and the pieces about ten inches apart in the drills, cover with a shovel plow, and harrow and roll the ground; the rolling is valuable to crush the lumps that would otherwise prevent the sun from having its full effect on the soil. Of the after culture we will not speak at this time, as the object of the present writing is to call the attention of farmers more immediately to the selection of soil, and to the value of autumn plowing of the ground.

As the potatoe rot is not common to that part of the State, we will pass it over for the present, and turn our attention to errors common at the north. And here we must

first insist on the importance of using only land that has had but one crop of the small grains since it was in grass; this is the first dogma in our creed to the successful growing of this crop. Such land should be fall-plowed, and, if for an early crop, need not be plowed again in the spring, but marked off, as before described, and planted in the same manner. This is done early in April, and so soon as the plants begin to appear above ground, should be thoroughly harrowed.

The potatoe is so much more healthy in this sod land than in the old land that we wonder that farmers do not oftener regard it. We usually plant from five to ten acres of potatoes, and always on this kind of land, and while our neighbors are seriously troubled with the rot and failure of crops, our crops are always fair. This year the average is not large, only about one hundred bushels to the acre, though two men could easily did one hundred bushels a day. We thus have demonstrated by actual experiment during several years that our practice has the merit of profit, and superior to any other now in use.

#### VALUE OF VARIETIES.

For the main crop we cultivate but few varieties.

Garnet Chili 182 bushels at the rate of 155 bushels to the acre. Pink Eye eighty bushels to eighty-seven bushels per acre. purple Neshannock, sixty-five bushels per acre ninety-seven bushels. Carter one hundred and thirty-five bushels, seventy-five per acre. Neshannock (Mercer) fifty-five bushels, eighty-eight bushels per acre. The Garnet Chili is very productive, but only second rate for the table; but its great productiveness and immunity from the rot will make it popular.

The pink eye, when in new land, and well cultivated, is second to no other for the table, but rambles so in the hill that farmers dislike it. The Purple Neshannock is one of the most valuable for the table, and

for spring and summer superior to any variety that we have ever grown; in this respect it stands at the head of the list. This has no blue or purple streaks in the flesh, but is of a pure starchy white. We have seen potatoes called blue and black Neshannock but which are unfit for the table. The Carter is an excellent potatoe for the table, but housekeepers dislike it on account of the numerous deep eyes it contains. The Neshannock or Mercer has stood at the head of the list for an early market variety for the past thirty years, and is as yet unsurpassed in this respect. We have often raised two hundred bushels to the acre. Unfortunately it is very liable to the rot, and on this account is not so much planted for the main crop as formerly. For the early crop in Egypt it has no equal. The purple Neshannock being little liable to the rot, yielding a fair crop, and being so valuable for spring and summer use, we have placed it prominent for that purpose. This article might appear out of season, but such is not the case; for having just closed the harvesting of the crop, all that pertains to it is yet fresh in our mind, and we are thus capable of correcting the errors of the past. We all know that it will not do to manure the land for this crop, as that induces the rot, and on old lands we have too many weeds, land not in good order, and the yield small. On the contrary, the sod land, called by farmers, second sod, or the second year that it is cropped after breaking up, whether of prairie, hurd grass or clover, will be more free of weeds, and rich in vegetable mold, we cannot well fail of a crop; and it is on this soil that the potatoe is most exempt from the rot and other maladies. These are sufficient reasons for calling the attention of the readers of the FARMER to the subject now, when it is the proper time to not only select the potatoe patch for next year, and plow the land, but to select and save the proper varieties for seed. Before the season for planting arrives we shall give full



directions to insure a good crop at the least cost of labor. We will here remark that for the early market the Neshannock, for fall and winter shipment the Garnet, and for the spring and early summer the purple Neshannock will command our attention. Should we continue the other varieties named, it will be in a small way.

### Fair of the State Horticultural Society.

HELD IN CHICAGO SEPT. 9TH, 10TH, 11TH AND 12TH, 1862.

This was the first fair ever held by the Society. The winter meetings having been for discussions and comparisons of fruits, not for competition. The fair is not to interfere with these valuable winter meetings, the next one being adjourned to Bloomington for December, the time to be fixed by the President, O. B. Galusha.

The show of fruit and flowers was large, and as a whole, creditable to the State. But with the exception of two or three exhibitors, the vegetable department was neglected. Had the acting manager given this subject his attention, and personally called on the prominent Chicago gardeners, we are assured that a very different result would have been arrived at. The Society has gained some experience in this—their first fair, which may be of use to them. There can be no doubt as to the value of having a paid agent to attend to the details of the business previous to the fair, but unless he sees and converses personally with the gardeners and florists in the immediate neighborhood, and writes to those at a distance, he will be of little service—in fact, a damage to the enterprise. He can do much to advise and encourage the timid and the backward. To all such, it is an untried experiment, and they need urging; and in many cases, instruction how and what to exhibit. This is more practically important at the first than subsequent fairs. We shall, therefore, urge the propriety of having rooms and obtaining some person at a salary, to attend to those duties for a month or two previous to the fair. The omission of duty in the present case, was more from a want of knowledge of what was necessary, more than any disposition to avoid labor or responsibility. In other departments the work was most admirably done, and will serve as a pattern for all future actuaries.

Financially, the fair was not such a success as its friends hoped to reap, and here the Board committed a grave error in regard to the time, as it turned out. Supposing that the Horse Fair

would attract thousands to the city, all of whom would be pleased to spend their evenings at the hall. It was natural for them to select this as the proper time to hold the fair, but the result proved that it was the very worst that could have been selected, for both strangers and citizens who attended the Horse Fair, were so completely jaded out with the days attendance, that it was impossible to attend in the evening. The Horse Fair was a worse failure, financially, than this. That was backed up by large contributions and outside aid, while this stood upon its merits, unaided by a single outside dollar. It paid all expenses, but to the regret of all, the premiums are left unprovided for. Many of these were donated to the Society by those who appreciated the undertaking, but we hope that means will be provided at the December meeting to liquidate all claims of this kind. A list of these claims and the amounts will be found in this connection. A list also of those who generously came to the aid of the Society, and denoted their premiums, will be found in its proper place.

The week previous to the fair, the President, W. C. Flagg, J. E. Starr, Bryant, Sanders and others, gave their valuable aid to decorate Bryan Hall. Several ladies at the head, of whom stand first and foremost in the good work, Mrs. J. Asa Kennicott, of Kenwood, gave their valuable aid also.

The list of entries will prove valuable hereafter as a matter of history, and we append them. By this it will be seen the extent of the fruit and floral show being the largest ever before seen in the west; and in fruits, probably unsurpassed anywhere.

#### LIST OF ENTRIES.

In the first place, we must commend the most admirable arrangement of the premium list as made up by Secretary Chase, in which each article for a premium, was numbered consecutively, thus:—

1. Best display of apples.
2. Best six varieties for summer use.
3. Best six varieties for winter use.
4. Best one variety autumn cooking.
5. Best one variety winter cooking.

Dispensing with all lettering of classes as is customary.

In the fruit department, we have apples, pears, peaches, plums, etc., and the numbers running through the series. By this system, few if any mistakes can occur, and there is no mystification of letters, classes and numbers, there being but one number to one article, and the same number not repeated.

## FRUIT DEPARTMENT.

## Lot.

## APPLES.

- 1—Best display in variety under name, 3 average specimens each.....\$5 00  
 Second do..... 4 00  
 Third..... 3 00  
 Fourth..... 2 00  
 Jas. Smith & Son 1st prem., S. G. Minkler 2d prem., O. B. Galush 3d prem., A. and F. Starr, M. L. Dunlap, Dr. Geo. Haskell, Samuel Edwards.
- 2—Best summer, 6 varieties, 3 of each..... 3 00  
 Second..... 2 00  
 Third..... 1 00  
 W. H. Hauson 1st prem., Dr. Geo. Haskell, 2d prem., J. R. Tull 3d prem., A. R. Whitney.
- 3—Best autumn, 6 varieties..... 3 00  
 Second..... 2 00  
 Third..... 1 00  
 Geo. Haskell 1st prem., W. H. Hauson 2d prem., O. B. Galusha, A. R. Whitney, A. W. Welden.
- 4—Best winter, 6 varieties..... 3 00  
 Second..... 2 00  
 Third..... 1 00  
 Benj. Vaneil 1st prem., A. and F. Starr 2d prem., Evans & Bro. 3d prem., Geo. Haskell, A. R. Whitney, O. B. Galusha.
- 5—Best autumn, 12 varieties..... 3 00  
 Second..... 2 00  
 Third..... 1 00  
 J. R. Tull 1st prem.
- 6—Best winter, 12 varieties..... 3 00  
 Second..... 2 00  
 Third..... 1 00  
 Benj. Vaneil 1st prem., O. B. Galusha.
- 7—Best winter, 24 varieties..... 4 00  
 Second..... 3 00  
 Third..... 2 00  
 Benj. Vaneil 1st prem., J. R. Tull 2d prem.
- 8—Best summer cooking, for general cultivation, single variety..... 3 00  
 Second..... 2 00  
 Evans & Bro. 1st prem. (on Keswick's Codlin), Joel Reeves 2d prem., (on Dutchess of Oldenburgh), J. R. Tull, Mrs. D. M. P. Davis, A. R. Whitney.
- 9—Best autumn cooking, for general cultivation, single variety..... 3 00  
 Second..... 2 00  
 J. R. Tull 1st prem. (on Maidens Blush), Evans & Bro. 2d (on Backingham), O. B. Galusha, J. Reeves, A. and F. Starr, A. R. Whitney, S. G. Minkler, Geo. Haskell.
- 10—Best winter cooking for general cultivation, single variety..... 3 00  
 Second..... 2 00  
 S. G. Minkler 1st prem., (on Winesap), J. R. Tull 2d prem., (on Yellow Bellflower), Samuel Dunlap, B. Vaneil, A. R. Whitney.
- 11—Best display Siberian Crab, in variety, half peck each..... 3 00  
 Second..... 2 00  
 S. G. Minkler 1st prem., A. and F. Starr 2d prem., A. R. Whitney.

- 12—Best Siberian Crab, single variety, half peck..... 2 00  
 S. G. Minkler first prem., (Yellow Siberian Crab), J. R. Tull, A. and F. Starr, Joel Reeves.

- 13—Best display of apples in variety, without regard to grower..... 5 00  
 Second..... 3 00

G. Neally first prem., G. A. Baker & P. Earle second prem., D. C. Young.

- 14—Best sweet for baking..... 2 00  
 J. R. Tull first prem., (on Winter Sweet Paradise), A. R. Whitney, Joel Reeves.

COMMITTEE.—F. K. Phenix, W. C. Flagg, G. H. Baker, N. Overman, Geo. Haskell.

## PEARS.

- 15—Best display, in variety, under name... ..\$5 00  
 Second..... 3 00  
 Third..... 2 00

C. E. Peck first prem., C. A. Montross second prem., D. C. Young, third prem., G. Neally, A. S. & Geo. Barry, C. H. Hibbard,

- 16—Best summer, three varieties..... 3 00  
 Second..... 2 00  
 (No entry.)

- 17—Best autumn, 3 varieties..... 3 00  
 Second..... 2 00

C. H. Hibbard first prem., (Bartlett, White Doyman Grey do), A. S. & Geo. Barry second prem., (White Doyenne, Dutchess de Argoulme and L. B. de Jersey), S. G. Minkler, Newhall & Clark, Benj. Vaneil, S. Foster, C. E. Peck.

- 18—Best winter, 3 varieties..... 3 00  
 Second..... 2 00  
 Benj. Vaneil, C. H. Hibbard.

The Committee say: "Although there were several entries, none of them filled the requirements of the premium list."

- 19—Best Bartlett, 6 specimens..... 2 00  
 Second..... 1 00

Newhall & Clark first prem., A. S. & Geo. Barry second prem., J. A. Pettingale, G. Neally, Suel Foster, C. E. Peck.

- 20—Best Flemish Beauty, 6 specimens..... 2 00  
 Second..... 1 00

G. Neally first prem., C. E. Peck second prem., W. H. Hauson, K. H. Fell, S. G. Minkler.

- 21—Best White Doyenne, 6 specimens..... 2 00  
 Second..... 1 00

Benj. Vaneil first prem., Newhall & Clark second prem., G. Neally, S. G. Minkler, C. E. Peck, A. S. & Geo. Barry.

- 22—Best Winter Nellis..... 2 00  
 Second..... 1 00

G. Neally first prem., C. E. Peck second.

- 23—Best Dutchess..... 2 00  
 Second..... 1 00

Benj. Vaneil first prem., Newhall & Clark second prem., G. Neally, A. S. & Geo. Barry, C. E. Peck, J. A. Pettingale.

Largest ten Pears—G. H. Baker, Dutchess de Argoualeme.

In connection with this report, the Committee beg to remark, that the want of proper care in the arrangement and classification of the fruits by the exhibitors, compelled us to overlook some fine varieties. We notice, with regret, that some of the finest were not entered at all, and that the great distance that separated the several lots in competition from the southern limits of Illinois to the center of Iowa, necessarily caused a great difference in the degree of development, ripeness, and consequent perfectness of the fruit, as the ripeness of the pear above, almost every other fruit, is affected by climate.

GEO. E. KIMBALL,

J. C. TEAS,

H. A. TRUAX,

WM. MUIR,

*Committee.*

#### PEACHES.

24—Best display, in variety under name, 3 of each.....\$10 00  
Second..... 5 00  
Third..... 3 00  
Fourth..... 2 00

George Booth.

25—Best 6 varieties, under name..... 3 00  
Second..... 2 00

Geo. Booth.

27—Largest 10 specimens under name, without regard to grower..... 2 00  
Second..... 1 00

A. S. & Geo. Barry, Evans & Bro.

28—Best basket peaches put up for market... 3 00  
Second..... 2 00

Geo. Booth, Newhall & Clark, O. R. Winters, Evans & Bro., L. A. Talcott.

29—Best new hardy seedling, worthy general cultivation. Location, habits of tree, etc., must be given..... 5 00

Evans & Bro.

#### PLUMS.

30—Best display of cultivated, in variety, under name..... 3 00  
Second..... 2 00  
Third..... 1 00

J. R. Tull.

34—Best native variety, worthy cultivation, with location stated..... 2 00

J. E. Starr 1st prem.

#### GRAPES.

35—Best display American, in variety, under name..... 5 00  
Second..... 4 00  
Third..... 3 00

Fourth..... 2 00  
G. H. Baker, W. C. Hanford, Dr. M. Merrick, J. S. Sherman, J. A. Pettingale.

36—Best two varieties, 5 lbs. each..... 3 00  
Second..... 2 00  
G. H. Baker, J. S. Sherman.

37—Best 3 varieties, 5 lbs. each..... 3 00  
Second..... 2 00

Jas. Smith, G. H. Baker, G. Neally, J. S. Sherman.

38—Best of any variety, 10lbs..... 3 00

E. S. Hull, G. H. Baker, J. S. Sherman, James Smith, Dr. H. Chaffee.

39—Best display foreign, in variety, under name..... 5 00  
Second..... 4 00  
Third..... 3 00  
Fourth..... 2 00

Francis Hooker, J. S. Sherman, Dr. H. Chaffee.

#### QUINCES.

41—Best display, in variety, under name..... 3 00  
Second..... 2 00  
Third..... 1 00

A. S. & Geo. Barry 1st prem., J. R. Tull.

#### BLACKBERRIES.

37—Best Lawton, two qts..... 3 00  
Second..... 2 00

Mrs. D. M. P. Davis 1st prem.

#### GOOSEBERRIES.

50—Best display, in variety, under name, two qts. each..... 3 00  
Second..... 2 00

Samuel Edwards 1st prem.

#### DRIED FRUITS.

62—Best display in variety, of small fruits dried in sugar, 5 sorts, with mode of drying. Competition not confined to producer. 3 00  
Second..... 2 00

O. B. Galusha first prem., Joel Reeves second prem.

#### PRESERVED AND CANNED FRUITS.

64—Best preserved peaches..... 1 00  
Mrs. J. Asa Kennicott.

69—Best strawberries..... 1 00  
Mrs. J. Asa Kennicott.

70—Best and largest collection preserved fruits in cans or glass..... 5 00  
Mrs. J. Asa Kennicott.

72—Best single variety peaches..... 2 00  
Mrs. J. Asa Kennicott.

73—Best Cherries..... 2 00  
Mrs. J. Asa Kennicott.

75—Best Raspberries..... 2 00  
Mrs. J. Asa Kennicott.

76—Best blackberries.....	\$2 00
Mrs. J. Asa Kennicott.	
77—Best Strawberries.....	2 00
Mrs. J. Asa Kennicott.	
78—Best currant jelly.....	2 00
Mrs. J. Asa Kennicott.	
79—Best apple jelly.....	2 00
Mrs. J. Asa Kennicott.	

WINES, ETC.

83—Best collection native, in variety.....	5 00
Second.....	3 00
Third.....	2 00
W. C. Hanford.	
84—Best Catawba, 3 bottles.....	2 00
Second.....	1 00
W. C. Hanford.	
85—Best wild grape, 3 bottles.....	2 00
Second.....	1 00
W. C. Hanford.	
86—Best grape, any variety, 3 bottles.....	2 00
Second.....	1 00
W. C. Hanford.	
87—Best currant, 3 bottles.....	2 00
C. H. Hibbard, Isaac A. Poole, Wm. G. Ferguson, J. E. Starr, A. S. & Geo. Barry.	
91—Best Strawberrys, 3 bottles.....	2 00
G. Neally, A. S. & Geo. Barry.	
95—Best sweet cider, 10 gals. in keg.....	2 00
Second.....	1 00
S. G. Minkler.	
97—Best cider vinegar, 10 gals. in keg.....	2 00
Second.....	1 00
S. G. Minkler.	

AWARDS.

FRUIT DEPARTMEN.

PLUMS.

34—Best variety native plums, one entry, J. E. Starr.....	first prem.
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QUINCES.

41—Best display in variety under name, A. S. & Geo. Barry.....	first prem.
47—Best Lawton blackberries, Mrs. Davis.....	first prem.
62—Best display of small fruits, dried in sugar, O. B. Galusha.....	first prem.
Joel Reeves.....	sec'd prem.
299—Best device for marketing small fruits by railroad, not in common use, one entry. Very good, but in common use.	

PAINTINGS OF FRUITS.

199—Best and largest collection by H. M. Thompson, Lake Forest Ills., Fine specimens of art, and very correct; but col- ored lithographs—not strictly paintings. Conse- quently, no award could be made according to the rules of the society.
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MISCELLANEOUS.

12—Currants—best display in variety, un- der name, 25 varieties, S. Edwards...first prem.
4—Yellow pine, one specimen, J. A. Car- penter—unworthy.....
2—Seedling apples—three varieties. One recommended for trial.....
3—Best box honey, very fine, A. S. & Geo. Barry.....first prem.
5—Figs—imature. Prem. not recommended
6—Pears—Vicar of Winkfield, and Belle Lucrative, 6 specimens—inferior.....
8—Pears, six specimens each of Grey Doy- enne and Beurre Diel, G. Neally.....first prem.
10—German Prune Plum, H. H. Marsh...first prem.
11—Basket of pears for market, L. B. Platt & Co.....first prem.
13—High bush cranberries, fine specimen, C. H. Hibbard.....first prem.

He recommends for general cultivation: Plant eight by eight feet on low, rich land; will grow from six to eight feet in height. Covers the ground in four years; yields between one and two hundred bushels per acre.

Lots 64, 69, 72, 73, 75, 76, 77, 78, 79.—Best pre- served peaches, strawberries, etc., Mrs. J. Asa Kenni- cott, Kenwood Ills., first premium on each.

FRESH FRUITS.

Best peaches.....	first prem.
Best cherries.....	first prem.
Best raspberries.....	first prem.
Best blackberries.....	first prem.
Best strawberries.....	first prem.

PREPARATION.—Three fourths of a pound of sugar to one pound of fruit; one half the amount of sugar layered with the fruit, in shallow ves- sels; stand over night; then pour off the syrup —with which, mix the remaining half of sugar; bring it to a boil; strain and pour on the fruit while hot.

Large fruits may require a second scalding of the syrup.

We, the Committe, heartily recommend Mrs. Kennicott's method of preparing fruit, as the

Specimens on exhibition fully merit their regard.

T. J. EVANS,  
GEO. BARRY,  
JOHN F. NASH,  
*Committee.*

### FLORAL DEPARTMENT.

#### STOVE AND GREENHOUSE PLANTS.

117—Best display of not less than 50 varieties.  
one-half in bloom.....\$10.00  
Second ..... 5 00

In this department we propose to grope the offerings of each person and refer the reader to the report of the committee for the awards. The preceding we have arranged the best we could, the Secretaries and Superintendents of departments not having attempted any classification, our time will not allow of any further attempt to unravel the mystic web; and we shall leave the reader to grope his way after us. Had the Secretary followed the plan adopted by the very able Secretary of the Illinois State Agricultural Society, our task would have been easy; but we must learn, though in this connection it would be better to bring ripe experience and send the raw ones to some other school.

#### C. E. PECK—

Best 12 Asters.  
Lot of ornamental grasses.  
Lot of Everlasting flowers.

#### C. H. WALDO, gardener to Dr. Kennicott—

Best 12 Verbenas.  
“ seedling Verbenas.....first prem.  
German stocks.  
Cut Roses.....second prem.  
Best display of Verbenas..... “  
“ “ Dahlias..... “  
“ 12 variety Dahlias..... “  
Largest boquet of Dahlias.  
Best display of Asters.  
“ 12 varieties “  
“ seedling Per. Phlox.....first prem.  
“ China and Japan Pinks.

#### J. E. WATKINS—

Best 12 Fuchias.

#### EDGAR SANDERS—

Collection of Verbenas.  
Best single plant of Lantana.  
“ display of Fuchias.  
“ display of cut flowers.....sec. prem.  
“ display of Begonias  
“ display of Lantanas  
“ 12 varieties Verbenas.....first prem.  
“ collection of Ora. Grasses.....first prem.  
“ display of Antirrhinum.....sec'd prem.  
“ display of Per. Phlox  
“ hand boquet.....first prem.  
“ pr. hand boquet.....sec. prem.  
“ floral wreath  
“ basket of flowers.....sec. prem.

LOUIS PANTLAN.—To the genius, good taste, and persevering industry of this modest and unassuming florist the society was indebted for that gem of art, the “Temple of Flora.” Without a green house—without the appliances that wealth brings to the aid of the beautiful, in this department he achieved what no one else had the boldness to attempt. That he did it nobly no visitor but will bear willing testimony in his behalf. Louis Pantlan can hold no second place in correct taste and successful culture as a florest. He needs only to be known to be appreciated. In addition to the “Temple,” which required thousands of flowers in its structure, Mr. P. contributed:

Best display of Pansies.  
“ pair hand boquets.  
“ display of Phlox Drumundii, first prem.  
“ “ balsams.  
“ “ single specimen of pink.  
“ “ China and Japan Pink, first pre.  
“ “ Anterrhinum.....first prem.  
“ “ Dahlias.....commended  
“ “ Everlasting flower,...first prem.  
“ “ Double Zinnia, high commendation.  
“ “ Trophaelium.  
“ “ Althea Sirensis, high commendation.  
“ Seedling Verbena.....sec. prem.  
“ “ Phlox Drumundii.

#### W. G. FERGUSON—

Best Seedling Petunia.  
“ display of cut flowers.....first prem.  
“ display of Dahlias.....first prem.  
“ display of Phlox Drumundii.

#### E. G. ABELL—

Best pair flat hand boquets.  
“ display of balsams.....first prem.

#### JOHN BLAIR—

Best rustic chair.....first prem.  
Largest collection of rustic work...first prem.  
Best display of Asters.  
“ display of cut flowers.....sec. prem.  
“ Vase for cut flowers.....first prem.

#### W. A. DICKERMAN—

Best 12 Dahlias

#### LEWIS ELLSWORTH & Co.

Best display of cut roses.....first prem.  
“ 12 Dahlias  
“ display of Dahlias.....first prem.  
“ display of Verbenas.  
“ display per Phlox.....sec. prem.

#### H. P. KIMBALL—

Best display of Pansies.  
“ pair table boquets.....first prem.  
“ display of cut flowers.....third prem.  
“ 12 Dahlias.

#### JOHN C. URE.

Best 12 varieties begonias.  
“ pair hand boquets.  
1 Norway Spruce.



- 1 Farfugium Grande.
- 1 Canna India.

## F. K. PHENIX—

15 varieties of hardy evergreens—over forty trees—making a small forest—nearly filling the large stage.

Best display of cut roses.

“ display of Dahlias.

“ 12 var. Dahlias .....first prem.

“ display Verbenas.....sec. prem.

## ROBT. KUNTZ, gardener to E. B. McCagg—

Best collection of variagated plants.

“ “ Begonias.

“ “ Bouvardias.

“ specimens of Orchids.

“ collection of Ferns.

The above were not entered for premiums. Plants all very fine and highly commended by all who saw them.

## J. F. BALDWIN—

4 large and American Arborvitas in tubs.

## F. SULZER, of Graceland Gardens—

Best small Dahlia boquet.

“ table boquet.....sec. prem.

“ display of Begonias.

“ display of variagated plants.

## D. BONNARD—

Best pair hand boquets.....first prem.

“ and largest flat boquet of Dahlias, 2d pr.

The above are three feet high.

## MRS. D. M. P. DAVIS—

Best display of cut roses.

“ display of Dahlias.

“ 12 varieties Dahlias.

“ display of Asters.

“ display of seedling Verbenas.

“ display of per Phlox.....sec. prem.

“ large boquet of Dahlias.

Specimens of variagated plants.

Hand boquet of variagated plants.

## MRS. H. STREETER—

Best large boquet of Dahlias.....first prem.

## H. P. KIMBALL—

Best 12 varieties Verbenas.

“ display German Stocks.

“ display German Asters.....first prem.

“ pair flat boquets.....first prem.

## H. M. THOMPSON—

## STOVE AND HOT HOUSE PLANTS OF COMMERCE.

- 1 Pine Apple (Annassa) in fruit.
- 1 Champlain's Moss Basket.
- 1 Pine Apple (Annassa) small plant.
- 1 Coffee tree, in fruit.
- 1 Tea tree.
- 1 Cocanut.
- 1 Sago plant.
- 1 Black pepper.
- 1 Ginger plant.
- 1 Cinnamon tree.
- 1 Allspice.
- 1 Olea (Olea Europea).
- 1 Pomegranite.

- 1 Date.
- 1 Fig.
- 1 Cotton plant in pot.
- 1 Orange.
- 1 Lemon.
- 1 Lime.
- 1 India rubber.
- 1 Bannana.

## MISCELLANEOUS.

## SUEL FOSTER—

Seedling apples.

## A. S. &amp; GEO. BARRY—

Box honey—very fine.

Yellow pine.

Figs.

## G. NEALLY—

6 Vicar of Winkfield pears.

6 Belle Lucrative.

6 Grey Doyenne.

6 Bum Dial—all very fine.

## H. H. MARSH—

German prune plums—nearly a half bushel of fine specimens.

## L. B. PLATT &amp; Co.—

Basket of pears.

## C. H. HIBBARD—

Specimen of cranberries.

## H. M. AUSTIN—

Three plates of apples grown in his garden at Harlem—all fair.

## J. H. REESE—

Two varieties foreign grapes—very superior.

## H. P. STANLEY—

Ten varieties of peaches of largest size—very suburb.

## D. REESE WILLIAMS—

Patent bee hive.

This hive appears to have been gotten up for the use of bees, and attracted much attention for its simplicity and value for artificial swarming, and regulating the size of the several swarms. By it, the weak swarms are made strong from the large ones, without any particular trouble.

The Committee on the above, were Louis Pantlan, H. P. Kimball, A. Bryant, Jun., J. C. Teas, E. J. Teas, and C R Overman.

They remark: “In regard to the Fuchias, they beg leave to suggest, that many of the plants, in their opinion are faulty in shape; being too tall without branches, and not fine pyramidal specimens, branched from the bottom as we should like to see.”

They recommend a special premium to Mrs. Kennicott, of Kenwood, for seedling petunia,

The large collection of plants of commerce, by Mr. H. M. Thompson, evince enterprise in

collecting and eminent success in culture, not less than liberality in bringing so fine a collection so far to the fair, whereby the delicate plants must necessarily be more or less injured. In view of the attraction these plants add to our display, we think it due to recommend a special premium of \$25 and the thanks of the Society.

The magnificent collection of variegated leaved plants, forming an attractive feature of the exhibition, we would respectfully recommend a special premium of \$20, while we assure the exhibitor of the grateful appreciation by the Society of this contribution.

A group of superb Oleanders, by A. T. Sherman, from the Rose Hill Cemetery grounds, in full bloom, deserves special notice and commendation, and recommend a premium of \$3 for the same. One-half of these plants were donated to the Soldier's Aid Fund.

An enormous Canna Indica (Gigantia), some seven feet high, and of noble proportions, from the garden of H. P. Kimball, of Rockford, we think, deserves special comment, and we recommend a discretionary premium of \$3.

A Wax plant, (Hoya) a most magnificent specimen, some four years old and five feet high, grown in a tub. Exhibited by Mrs. Atwater of Chicago, which we recommend to the liberal consideration of the Executive Committee.

Cotton plants grown in central Illinois, by Hon. M. L. Dunlap, gives promise of a fair crop, part of which is now nearly ripened.

Best pair of Norway Spruce, first premium awarded to J. C. Ure. For best collection fifteen varieties, to F. K. Phenix. Best pair American Arborvitae, to Mr. Baldwin.

We have already given the entries and awards on hardy plants, and we now add the

#### MISCELLANEOUS.

In that class, Committee, R. H. Holder, C. R. Overman, Mr. Hanford, D. Worthington, Mr. Byrne, Miss. Hattie A. Durand.

First premium basket of flowers, by Mrs. Dr. J. Asa Kennicott, of Kenwood; second, E. Sanders.

Display of Altheas by D. Pantlon, (Rose of Sharon), the committee would recommend a first premium to this display.

Another collection of Altheas by N. Thompson, is worthy of notice.

A display of double Zinnias by L. Patlan, is recommended for a first premium, and a first premium for a single specimen of the same, to Mrs. Dr. J. Asa Kennicott.

Mrs. Dr. J. Asa Kennicott first premium on Pansies.

A. H. Hovey, best collection of ornamental flower pots.

H. M. Thompson, best collection of paintings of fruit. This collection was very large and fine, and attracted the attention of all—is highly commended. The

#### HORTICULTURAL LIBRARY

of this gentleman, is doubtless the largest and most valuable in the west, comprising works on landscape gardening, gardening, colored plates of flowers and fruits, designs, etc. The committee recommend a first premium, as the best library of the kind in the north-west.

#### VEGETABLES.

The Committee were T. B. Alverson, H. A. Truax, D. Worthington, A. H. Hovey, and J. C. Johnson.

In this department there was little competition, yet the collections were good, and that of Mr. Periam most superb.

#### COLLECTION OF J. PERIAM—

Best display.....first prem.

" vegetable not in common use, (Okra).

" Early Irish potatoes.

Most profitable potatoes.

" Sweet potatoes.

" Early table beet.

" Late table beet.

" Early turnips.

" Early sweet corn.

" Late corn.

" Okra.

" Lima beans.

#### Largest collection garden peas—

Best early market pea.

" Lots market pea.

" Early cucumber.

" Largest display of water melons.

Most valuable variety.

" Cantelope melon.

" Narrow squash.

" Hubbard squash.

" Summer squash.

" Seedling rhubarb.

" Early cabbage.

" Pop corn.

" Brocoli.

" Kohl Rhobi.

" Tomatoes.

" Egg plant.

" Peppers.

" Sugar beet.

" Ten tomatoes.

" One-fourth bushel onions.

" One-fourth bushel hill onions.

" Seed leaf tobacco.

" Tobacco.

We have not the report of the Committee on Vegetables, and cannot, therefore, give the awards, but Mr. Periam swept down nearly the

whole list. His display of vegetables, was one of the best ever before exhibited in this city by one individual.

JOEL REEVES—

Best late Irish potatoes.

“ Citron melon.

“ Ten Irish potatoes.

G. B. ALVERSON—

Best Yellow Onion.

NEWHALL & CLARK—

Sweet potatoes, first prem.

T. K. PHENIX—

Best and largest collection of fruit trees not over three years old.

“ Apple trees.

“ Dwarf pear trees.

JOHN C. URE—

Pumpkin, citron melon, and winter radish

D. & G. W. TENNEY.—Boston Morrow Squash, Citron Melon, Cellery, Cauliflower, Tomatoes, Egg Plant, table Parsnips, Early Turnips, Early Carrots, Yellow Onion, Late Sweet Corn, Early Cucumber, and Salsfy. Altogether, a choice and valuable collection.

H. M. AUSTIN—Hubbard Squash, Honolulu do. Three specimens Mask Mellon, three do. Water Mellon; four do. White Summer Squash; two do. Cucumbers; three do. Yellow Summer Squash, seven do; Red Tomato, three do.; White do.

This collection was very superior, being the first attempt at suburban gardening by this gentleman, showing what can be done when an attempt is made with the use of brains, it being the want of this commodity in gardening by amateurs, that cause them to fail, they supposing that brains are not required outside of the counting room.

#### A VALUABLE IF NOT A COSTLY LESSON.

It is probable that the Society will, at future meetings, employ a stenographer to make up their reports, or at least some person who has had experience in that special department, and whose whole time will be devoted to this important part of the business.

The recording secretaries are both able men, but one of them was too ill to attend to his duties, and the other was not present. This accounts for the paucity of the report, but hereafter it is to be hoped that the proper persons be employed to write out, in full, the report, and to assist the committees in their duties, as few men acting on committees are familiar with such work.

#### IMPLEMENTS.

Mr. A. H. Hovey of 73 Lake street, made a most magnificent display of horticultural tools, implements, seeds, flower pots, and a new style of landscape painting in moss; but though a committee was appointed to examine and report on its merits, we can find no record of their work, at least the actuary has sent us none.

To make up for the want of a better report, we append a portion of our report made at the time for the TRIBUNE.

#### FIRST DAY.

The opening of the Horticultural fair was announced for 10 A. M. of yesterday, and Bryan Hall was accordingly opened for that purpose, but the attendance was not large, in consequence of the mixed condition of vegetables, fruits and flowers that were being rapidly put in position. In the afternoon, the attendance became larger, and we can say that the prospect is more promising than its most sanguine friends anticipated.

The show of fruits is in all respects the largest and best that we have seen in the northwest. The gallery was filled with fruit early in the day and space was given in the main hall. The immense size of the apples, pears and peaches from Egypt, astonishes every one, and is worth more of itself than the cost of a season ticket.

#### FRUIT DEPARTMENT.

This department is presided over by Capt. Jas. E. Starr of Alton, whose good taste and energy has enabled him to present the several lots in the most attractive manner.

As you enter the gallery, the first thing that attracts your attention is the long table of grapes, rich and tempting as those from the hills of France.

The first lot is that of Mr. W. C. Hanford of Rockford, and consists of fifteen varieties, cultivated out doors. Among them we note Delaware, Concord Hartford, Prolific, Connecticut, York Maderia, Early Cluster, Clinton, Isabella, and Catawba. The specimens are large and well grown, and show that in the hands of good cultivators, this fruit can be grown in the most northern portion of our State. Mr. H. has also wine of Catawba, dry and sweet, Connecticut, Isabella, and mixed varieties. Of the merits of these we cannot speak, as they are, thus far, a sealed institution.

The next lot is that of Jas. Smith & Son, of Des Moines, Iowa. It has been supposed that on

the table lands of Iowa, fruit culture would be of little account, but the Messrs. Smith have most fully demonstrated that such an idea is sheer folly, and the laggards can now profit by their experience. Mr. S. puts the Concord at the head of the list as the great market grape—the grape for the million, the grape that can always be relied upon with that ordinary culture that farmers and professional men generally give. Hartford Prolific is another valuable grape. Mr. S. says that Concord, Hartford Prolific and Delaware are the best three grapes for the Northwest, in which we fully concur. In this collection the visitor will observe fine specimens of Diana, Tokalon, Franklin, Canby's August, Rebecca, Perkins, Garrigues and Mascadine.

#### GRAPES UNDER GLASS.

The collection from the graperies of I. H. Burch, presented by his gardener, F. Hooker, are of the highest merit. They number nine varieties. It requires a strong moral effort to pass by such tempting specimens. It certainly would not be safe to leave a hole in the garden fence from whence came such luscious specimens of this magnificent fruit.

Two plates of grapes from J. H. Reese, are very fine. Dr. E. S. Hull, of Alton, presents a fine collection of grapes, grown out of doors. G. H. Baker of Cobden, has Delaware, Catawba, Clinton, Isabella, Concord, and several varieties grown from the seed of raisins planted four years since. The Herbemont grape is also in the collection of Mr. B. The grape is small, but the clusters are long, and its value for wine will probably bring it into notice. The Diana is also another desirable grape in this collection.

Dr. Merrick, of Quincy, sent in a large and fine collection of thirteen varieties: Delaware, the best grown on exhibition; Rebecca, Catawba, Concord, and his new seedling the Chickasaw. This lot shows what can be done in the way of grape culture on the bluffs of the Mississippi.

#### PEARS.

On the same table is a fine lot of pears from the grounds of A. S. & Geo. Berry, of Alton, embracing Bartletts of most tempting exterior, Dutchess and White Doyenne.

We move along, being flanked to the right and left by the choicest assortment of peaches, pears and apples, which almost bewilders one to contemplate, and we give over for the day.

#### SECOND DAY.

On entering the Hall the first object that attracts the visitor is the Temple of Flora, standing in the center of the Hall. The design and work is that of Lewis Pantlan, and is a work of rare merit; it is not only the center of the Hall, but the great center of attraction.

The collection of Edward Sanders, of Lake View, is large and select. Our people have for several years been in the habit of decorating their grounds and rooms, with the gems of floral beauty, from the well known stock of this old establishment.

The display of William & Withold is not large, but very choice.

C. E. Peck shows asters, ornamental grasses, and a large lot of everlasting flowers.

H. C. Waldo, gardener for Dr. Kennicott, of the Grove, shows a good collection of everlasting flowers, verbenas, German stocks, cut roses, dahlias, asters, Japan and China pinks.

J. E. Watkins, of Graceland Cemetery, shows a fine collection of Fuchias.

Lewis Elsworth, of Naperville, by his gardener Reese, shows cut roses, dahlias, and verbenas.

Mrs. S. T. Atwater, of Chicago, shows a most magnificent wax plant, near five feet high and three broad.

#### ROCKFORD AHEAD.

Up to this morning, the gardeners of Rockford make the best display, our own gardeners being tardy in bringing their plants, but they propose to bring up the rear this afternoon.

We will catalogue those fine collections, and would call the attention of visitors to the fact that the Chicago gardeners will find in those of Rockford a pretty sharp competition. These latter men are wide awake and promptly on hand, which we cannot say of but few of those in Chicago. Our own gardeners should have filled the Hall the first day of the fair, but up to this morning, the large collections are not in place, and but just arriving at the hall. This is all wrong, and may have a powerful influence in taking the next annual fair to our more enterprising neighbors. Thanks to our Rockford friends, the hall will be filled to overflowing with gems of beauty.

W. G. Ferguson made the best display of cut flowers, in a bouquet of over sixty varieties of choice flowers, and has probably the best twelve dahlias in the hall. E. G. Abell shows two flat

boquets and a collection of Balsams. John Blair, one of the best landscape gardeners in the west, and gardener to Mrs. Manny, shows several specimens of rustic work, including vases and chairs, which attracted marked attention. His collections of asters is very large, exceeding anything of the kind in the hall.

Kimball & Strachan have a fine show of asters, cut flowers, a table bouquet over two feet high, one of the largest and most tasty display of flowers in that form, a large collection of verbenas and dahlias. The soil of Rockford must be well adapted to the verbenas, as we have never seen better flowers.

Mr. Dickerman shows a large and well selected lot of dahlias.

H. P. Kimball has in his collection, a choice lot of pansies, the only lot that we have seen in the hall. The largest plant in the hall is a *Canna Indica* in this collection. The plant is of this year's growth and full seven feet high. This plant is grown from bulbs, the same as dahlias, and would add to the attraction of any of our large or small yards and gardens. The cost is a mere trifle.

J. S. Sherman, of the Rockford nursery, shows a magnificent collection of eighty-four varieties of dahlias. These are all of different colors—a most superb collection. His collection of verbenas, both in color and arrangement, are of the highest merit. This Rockford collection of itself is well worth a visit to the hall.

John C. Ure, the popular superintendent of the city grounds, has a fine show of plants from his grounds at "Grapeton," consisting of *Bignonia*, hand boquets, and Norway spruce.

F. K. Phenix of Bloomington, has on exhibition a large display of cut roses and dahlias.

H. M. Thompson, of Lake Forest, by Frank Calvert, gardener. Last spring M. Stuart of New York, exhibited at the Brooklyn Horticultural Society a coffee tree said to be the only one then in the United States in a bearing state. That may all be true of that date, but in the collection of Mr. T. is another now in bearing, and is attracting no small amount of attention. Those wishing to see it will call in the day time, as the plant is too valuable and rare to run the risk of the gas light.

The collection of Mr. T. is rich in tropical plants. Among them the sago banana, date, olive, fig, pomegranate, cocoa nut, tea tree *India rubber*, cotton plant, cinnamon, allspice, black pepper, ginger, lemon, lime, orange, and two pine apples, one of them in a Champlain

basket. This plant is in fruit. The basket itself is a novelty, and it is claimed that a large fruit tree can be grown and fruited in one of these small baskets. Mr. T. has in addition a large collection of other plants. Also a Wardian case of the largest size, containing twenty-four beautiful leaved plants. Among the dahlias Mr. T. has one of rare merit.

A. T. Sherman, of Rose Hill Cemetery Greenhouse, exhibited a most superb show of oleanders in bloom.

F. Sulzer of Graceland Nursery shows a large collection of fuchsia bigonias and other greenhouse plants. Also boquets of dahlias and cut roses.

Among the collection of flowers is a large library of horticultural books owned by Mr. H. M. Thompson, whose large collection of plants we have noticed above. This library is especially valuable, being the largest library of the kind in the Northwest. Most of these books are very expensive. The *Garden of England* cost \$75.

Mrs. D. M. P. Davis, of Winnetka, shows a collection of cut flowers.

C. E. Peck, of the same place, shows asters, ornamental grasses and everlasting flowers.

Lewis Pantlen, of Chicago, shows phlox drumoudi, dahlias, Japan pinks, verbenas, balsams, and altheas, all very fine.

#### THE TOOLS WE WORK WITH.

A. H. Hovy of 73 Lake street, makes a fine show of things needed by tree planters and gardeners of all classes. In addition to tools of all varieties and forms, is a display of vases, cups, paper weights, etc., made of the plaster rock from the beds at Grand Rapids, Michigan. These plaster beds are among the most valuable in the world. The purity of the rock can be seen not only in these works of art, but in the specimens of the crude rock on exhibition.

Mr. H. is also a large dealer in seed, as his numerous specimens show. We are glad to welcome to the Northwest an establishment of this kind, the want of which has long been felt.

Some person wishing to add the useful to the beautiful has deposited several clothes wringers made by the Boston Wringer Company. Here is also a bee-hive, called Metcalf's Artificial Swarming and Equalizing Hive, in charge of Mr. D. R. Williams, of Chicago, the agent for this and other Western States. This is among the best of the artificial swarming hives, and will be found valuable in villages and cities, where the swarms would be lost at the time of swarming by leaving the grounds, it being impossible to follow them



in such locations. Almost every resident of a village or city having a small lot can keep bees in this hive, and if he would consult his interest he will save the honey going to waste about him. Bee culture should receive more attention than heretofore.

On the platform is a large collection of conifers. Mrs. F. T. Atwater shows a vase of flowers of large size and high merit. M. S. Dr. J. Asa Kennicott of Kenwood shows collections of antirrhinums, double balsams, verbenas, asters, everlasting flowers, native wild flowers, the only collection of those in the hall, Japan pinks, bouquets of cut greenhouse flowers, and a collection of hand and table bouquets. The bouquets and baskets of flowers were gotten up by Mrs. K., are second to none in the hall, Mrs. K. also has the only collection of preserved fruits, jellies and native wines, all of which are highly creditable, and shows what can be done by our suburban residents, when they have the will and taste to make the effort.

E. B. McCagg, Esq., by his gardener Heinrich Kuntze, shows a fine collection of tropical plants from the greenhouse, including Bigoneas, Ferns, Cannas, etc. It is seldom that we see so fine a collection of well grown plants.

Samuel Brooks, the oldest florist in Chicago, shows a general collection of greenhouse plants, including cacti, orchids, roses, geraniums, and Australian plants.

Miss M. Brooks, daughter of S. Brooks, has a good show of artificial wax flowers.

#### A GUMBO DINNER.

Dr. Kennicott, the "Old Doctor," discovered in the vegetable collection of J. Periam, a lot of Okra, or, as it is known at the South, "Gumbo." No sooner had the Doctor made this discovery than he posted off to the neighboring restaurants in search of somebody competent to make of this Okra and other compound, the dish called "Gumbo." His search was successful, and at 1 o'clock some dozen of the Doctor's invited guests sat down to test this favorite Southern dish. All pronounced it excellent, and agreed in their own minds that they would hereafter incorporate okra among the useful vegetables of their gardens.

This vegetable is easily grown, and the young pods, cooked as served up yesterday, need only to be known to be appreciated. Henceforth we go for gumbo soup.

#### WINES.

The show of native wines is limited to a few dozen bottles. W. C. Hanford, of Rockford, took

the first premium on Catawba. In current wines the competition was more brisk, but most of the samples were either too new or spoiled with too little currant juice and too much sugar. Mr. W. G. Ferguson, of Rock River, took the first premium, no others being given, the vote on the samples being too low to entitle them to a premium. The premium wine was made of half water and half currant juice, and four pounds of brown sugar to the gallon, and otherwise made in the usual way. We call this a good wine, but it would have been better if no water and less sugar had been used; forty gallons of currant juice and one hundred pounds of sugar. Our people will learn how to make wine out of our small fruits, but like all other branches of business they must first take lessons.

#### THIRD DAY

The third day of the Fair was a better success than any previous day. Considering, however, that the proceeds are to be devoted to the relief of our sick and wounded soldiers, and that the exhibition of fruits and flowers has never been surpassed in the West, it has not met with the encouragement it deserves. The main floor of the hall is a tangled maze of verdure and floral beauty, redolent with sweet perfumes. Gorgeous dahlias of every conceivable hue, the most delicate of roses sweet scented verbenas, tinged with all the colors of the rainbow, gracefully drooping ferns, gigantic shrubs, in the umbrage of which one might repose; strange tropical plants of wondrous beauty, all the flowers of the garden and greenhouse, bowers of evergreen spangled with starry flowers, wreaths and festoons, and long tables groaning with vegetable wealth—the mammoth productions of our rich prairie soil, form a collection of surpassing beauty and interest.

The galleries are loaded with fruit—every variety of grape, rosy peaches, as large as one fist, tempting pears, mammoth apples, wines, jellies and canned fruits, swimming "in lucid syrups tinct with cinnamon." The man who passes through that gallery with "hands off," must be a model of morality, and qualified to enter any institution having in view the inculcation of virtue.

In our report yesterday, we gave Mr. T. F. Baldwin credit for the fine display of conifers. This was in part an error, as Mr. B. is the owner of the four arbor vitæ, so much admired for their symmetrical form and glossy foliage. The other conifers are shown by F. K. Phenix, of Bloomington. This collection embraces nearly

or quite all of the valuable hardy evergreens. In this connection we take occasion to do full justice to our Bloomington friend, by giving a list of what we omitted yesterday. In his collection are eighty-three varieties of verbenas under name, forty-four hardy roses, forty-six of apples, seventy three-year old apple trees, thirty two-year old apple trees, eighty-six varieties of dahlias, and fourteen of pears. Taken all together, the collection is among the largest and most varied in the hall.

Half a dozen plants of cotton, from the farm of M. L. Dunlap, of Champaign, have been added to-day. The plants are an average of those in a lot of three-fourths of an acre, under field culture, as recommended by "Rural" in the Tribune last March. Many of the bolls are nearly full grown, and will be ready for picking the last of this month. The season has not been favorable to this plant, the wet weather giving it too rank a growth, at the expense of early maturity.

#### VEGETABLES.

The vegetable department is but poorly represented, so far as the number of entries are concerned, while in the quality of the specimens they are unsurpassed. The Society offered premiums for well grown table vegetables, not the overgrown Brobdignags so common at all fairs, consequently the exhibitors have confined themselves to that class of vegetables that are the most desirable in the kitchen. The Tremont and several other gardens are not represented, for the want of proper assistance to prepare for the exhibition; this is to be regretted, but under present circumstances, must be borne. This difficulty has not been confined to this department, but has extended to all others, and it is really surprising to most visitors to see the hall as well filled as it is.

In this department Mr. J. Periam, of Calumet, is the most prominent, his collection filling nearly a hundred feet of table room, and consists of sixty-six varieties, including many novelties, many of which promise to be valuable. The display of melons is unequalled, comprising Mountain Sprout, Black Spanish and Imperial. The family of squashes are not so large as select, the big ones having been set aside for those more valuable for culinary purposes. Among these the Boston Marrow ranks at the head. Mr. P. has a good collection of sweet potatoes, comprising Early Nansemond, Red Bermuda and Yellow Bermuda. A dozen years ago the man who would propose to grow sweet potatoes on the plains of Calumet would have been called insane, but here

we have the proof positive that the thing can be done, as will be seen by the list of awards. To-day, for the first time, this collection has attracted considerable attention. The part of the hall devoted to this lot being but poorly lighted, visitors have passed it by until the gas light in the evening, shows up this great variety of "garden truck."

D. W. and G. W. Tenny, of the town of Lake, show a good collection of vegetables, among them egg plants of enormous size, fine celery, cauli flowers, etc.

G. B. Alverson, Rockford, shows onions and tomatoes, all fine. A. W. Weldon, Rockford, shows onions of the Danver's Yellow variety. Joel Reeves, of Ainsworth, shows Irish potatoes and nutmeg melons. Newhall & Clark, of South Pass—a superb show of Nansemond sweet potatoes. J. C. Ure, of "Grapeton Garden," shows yellow pumpkins, that "is pumpkins," also melons and winter radish, all fine and well grown.

#### AWARDS ON VEGETABLES.

- Best display, 1st premium, J Periam
- 2d premium, D W and G W Tenny.
- Best collection Irish potatoes, J Periam.
- 2d best, the same.
- Best late Irish potatoes, Joel Reeves.
- Most profitable market potatoe, J Periam.
- (Early York.)
- Best sweet potatoes, Newhall and Clark.
- 2d best, J Periam.
- Best late beets, J. Periam.
- Early beets, J Periam.
- Table parsnips, D W & G W Tenny.
- Early table turnips, the same.
- Table carrots, the same.
- Winter radish, J C Ure.
- Yellow onion, G W Alverson.
- Hill onions, J Periam.
- Sett onions, from previous year, J Periam.
- Early sweet corn, J Periam.
- Extra early dwarf sweet, corn and late do, J Periam.
- 2d best, D W and G W Tenny.
- Best okra, J Periam.
- Lima Beans, J Periam.
- Best and largest variety of garden peas, J Periam.
- do late market, Mr Strocham, of Rockford.
- do early cucumber, D W and G W Tenny.
- do water melon, J Periam.
- Best citron melon, D W and G W Tenny.
- do cantelope melon, H W Austin.
- do Hubbard squash, D W and G W Tenny.
- do Boston Marrow, D W and G W Tenny
- do suinam squash, J Periam.
- do golden pumpkin, J C Ure.
- do celery, D W and G W Tenny.
- do early cabbage, J Periam.
- do culliflower, D W and G W Tenny.
- do tomato, the same.
- 2d best, J. Periam.

Best egg plant, D W and G W Tenny.  
 2d best, J Periam.  
 do pepper, J Periam.  
 do sugar beets, J Periam.

#### FRUIT DEPARTMENT.

In the fruit department is a large collection of paintings of fruit of natural size and color, exhibited by Dr. J. E. Kimball, of Iowa City, and painted by J. & G. Prestle. It may be new to our Western fruit growers to know that these gentlemen, father and son, do this kind of work for the Eastern nurserymen, and also similar paintings in all branches of natural history for the Smithsonian Institute, Washington, D. C.

Shall we pay tribute to Eastern dealers on the products of Western artists? This department has been from the first the great center of attraction, more especially that section labeled "Egypt," whose great orb like apples, immense pears, luscious grapes and melting peaches, attract the lovers of fruit. Northern grown fruits are nowhere. The choice collection from the "Leyden farm," and others, are in the same fix. There is but one way to do in the premises, and that is, to divide the land, so far as to make up a list of premiums for each section of the state, this has its advantages as well as disadvantages, but in a show of this kind, size and beauty will always win. The northern orchardist may contend that his fruits, though smaller, are more highly flavored, but this will not avail him, for the big showy fruit will carry the day on all such occasions.

It is interesting to observe what effect climate has on the size of almost all kinds of fruits, more especially apples and pears. The difference between those grown near the lake and those at Alton and South Pass; in Union county. The Iowa fruits are also a fair size, and in all respects very good. The collection of James Smith & Son, which is graced with the blue ribbon, is worthy of especial notice—not that it is the largest, but that the fruits are well grown and true to name.

Mrs. J. A. Kennicot, Kenwood, Ill., first premium on each, fresh fruits, best peaches, first premium; cherries, first premium; raspberries, first premium; blackberries, first premium; strawberries, first premium.

**PREPARATION**—Three-quarters of a pound of sugar to one pound of fruit; one-half the amount of sugar layered with the fruit, in shallow vessels, stand over night then pour off the syrup, with which mix the remaining half of sugar; bring to a boil; strain and then pour on the fruit while hot.

Large fruits may require a second soalding of the syrup.

#### LIST OF EXHIBITORS.

It will be interesting to know who are the fruit growers and their location as an index to the source to which we may look for good fruits:

- H W Austin, of Harlem.
- Suel Foster, brother of Dr Foster of this city, of Muscatine, Iowa, apples.
- C H Hibbard, McHenry county.
- J G Sherman, Rockford.
- George Haskell, Michigan.
- Samuel Edwards, Bureau county.
- J A Pettengill, Macoupin county.
- H Chaffre, Tolono.
- Mrs Asa Reeves, L B Piatt & Co, fruit dealers, presented specimens of peaches in baskets from the Michigan peach growers, all very fine samples.
- W S Steele, of Evanston, had a fine lot of the Lawton blackberry, also a seedling black cap raspberry.
- H H Marsh, of Chicago, German prunes.
- C H Hibbard, cranberries.
- J E Starr, of Elsah, Jersey county, plums and peaches.
- E C Peck, Winetka, Ill, a large collection of pears.
- O B Galusha, President of the Society, shows apples, pears and small fruit dried in sugar.
- Joel Reeves, of Ainsworth, Cook county—his apples and fruit dried in sugar.
- Francis Hooker, of Chicago, grapes.
- Jas Smith & Son, of Des Moines, Iowa, grapes.
- L A Tolcott, basket peaches for market.
- L A Houston, Lee county, apples and plums.
- Suel Foster, pears and apples.
- Wm Muir, Secretary of the Missouri State Horticultural Society, wine from the Merrimack Horticultural Society.
- K H Fell, of Bloomington pears.
- A & F Starr, of Alton, a large collection of apples.
- A R Whitney, apples. Mr W did not compete for premiums. He may be said to be rather a large orchardist, having a crop of four thousand bushels now on his trees—a pretty good answer to the oft repeated question, "Can you grow apples in Northern Illinois."
- J A Carpenter, of South Pass, (Coben Station) twelve apple and six dwarf pear trees.
- Parker Earle, South Pass apples.
- G H Baker, South Pass pears, grapes and apples.
- Benj Vancil, South Pass, pears and apples.
- C A Montross, Centralia, pears.
- Evans and Brother, South Pass, apples, pears, grapes and peaches—among them a seedling peach of very large size and high promise.
- Samuel Dunlap, of Harlem, apples.
- Mrs D M P Davis, of Winetka, Lawton blackberries.
- Isaac A Poole, currant wine.
- A S & George Barry, of Alton, pears and currant wine.
- Dr E S Hull, of Alton, grapes and peaches.
- Geo Booth, Alton, peaches.

C R Winters, basket of peaches.

J H Reese, Chicago, grapes.

H P Stanley, Chicago, peaches.

Wm G Ferguson, currant wine.

A W Weldon, apples.

Newhall & Clarke, South Pass, pears, apples and peaches.

W C Hanford, Rockford, the largest collection of wine—his dry Catawba and Hock being very excellent—also a large collection of grapes.

G P Hanson, Chicago, samples of currant wine.

M L Dunlap, Champaign, from his "Leyden Farm," Cook county, seventy varieties of apples and two of pears.

G H Baker, boxes and case for marketing small fruits.

D C Young, apples.

Dr M Merrick, of Quincy, pears and grapes.

S R Tull, of Iowa, a large collection of apples.

C C Nealy, Burlington, Iowa, apples and pears.

G E Kimball, for Amana Society of Iowa, paintings of fruit.

S G Minkler, apples, cider and cider vinegar.

#### A NEW ART.

In the collection of A. H. Hovey are several specimens of landscape drawing, which to the casual observer appear to have been printed, but this is not the case, as they are made of rock moss and gum arabic. They are very pretty and life-like, giving a natural look to the picture that cannot be obtained by the use of the pencil. We believe this is a new thing.

#### GRAPES.

The collections of grapes are none of them large, but embrace many of the new sorts, such as Delaware, Hartford, Prolific, Concord, Diana, and Rebecca. The first three are already favorites with all classes of people, for their vigor of growth, hardiness and good quality of fruit. The Delaware, in quality, stands at the head of the list, but is not equally vigorous in all parts of the State.

The committee not having handed in their report, we must defer it to another day.

In the collection of A. H. Hovey is a cheese, or rather a four bladed curd-knife. A young gentleman of decided ability was enlarging upon its value to several ladies, as a new bread knife, a labor-saving institution capable of cutting four slices at a time. One newly married lady who was gracefully leaning on the arm of her husband, was delighted with it, and Mr. H. will receive an order for one this morning.

The officers of the society are entitled to no small amount of credit for the able manner in which the fair has been conducted. Their ur-

banity and gentlemanly deportment have made them many warm friends, and have given the public confidence in their ability and fitness for the stations that they occupy. The State Horticultural Society may now be said to have a permanent position, having held a most successful fair under the most discouraging circumstances, and nothing but the determined will of the officers would have produced so happy a result. While State and county societies have given up in despair, and retired from the field, these men nothing daunted, have marched on to success.

The reporters of the city press are under obligations for the many attentions received throughout the Fair. To them was allotted the beautiful alcove, designed and created by Mr. Blair, of Rockford, where just out of the throng of visitors they could write out their daily reports. The exhibitors feasted them on melting pears, delicious peaches and rich grapes, a treat that they could fully appreciate.

The entrance to the hall, so much admired, is the handiwork of C. R. Overman, whose genial smiles and cordial greeting were in keeping with the surroundings where Pomona and Flora held high carnival.

**TAKE CARE OF YOUR HARNESS.**—More damage is done to a harness during the rainy weather of early and late winter, than during all the rest of the year. Saturated with water, covered with mud, and often frozen stiff, so as to almost break when bent, in necessary handling. Unusual care should be taken to keep it well oiled and hung up in a proper shape when not in use.

Thus treated, it will not only last many times longer, but look infinitely better than when neglected in the usual manner.

As to the kind of oil, we know nothing better than neat's foot or the daubing used by tanners. To give the black color characteristic of new leather, a little lamp black may be added, without detriment, though it is better not to use this second going over.

Before putting on the oil, however, there are two important considerations which must be observed—cleanliness and dampness. The necessity of the first is obvious, and the last is not less important, since the oil cannot penetrate the leather and make it soft and pliable if put on when it is dry and hard.

One of the best ways to give the leather the requisite degree of moisture is to rap up the several parts of the harness in wet cloths previous to oiling. But this trouble is unnecessary where washing has been resorted to for cleaning, as the oil may be applied before the leather is entirely dry. The oil should be rubbed in briskly with a brush or cloth, so as to ensure its absorption.

Varnish should never be used as it closes the pores and renders the penetration of the oil more difficult. Vegetable oils are hardening in their effects, and should never be used for that reason.

Finally, let the application of the oil be as frequent as needed, not once a year as the rule with some, or almost never, as is the practice of many.

## Discussions at the State Horticultural Society Fair at Chicago—Varieties and Culture of the Grape, etc.

During the fair, evening meetings were held in Bryan Hall, at which the attendance was small, but to some extent interesting. Our time was too fully occupied with other matters to attend, but the Recording Secretary promised us a report of them, but unfortunately his health was too feeble to attend to the matter fully, and since his return home, he writes us that his time and health will not enable him to write out even the few notes that he took, but encloses us the letter of Dr. H. Shroder, on grape culture, which we give below.

The Dr. has intelligence and zeal, and has given to the subject his best efforts. As we intend to visit his grounds in the course of a few weeks, we will defer our remarks to that time, and at once introduce the Dr. to our readers.—ED.

*To the President and members of the State Horticultural Society :*

\* \* \* \* \*

In wet seasons the Catawba will rot, and in dry ones, the Isabella. Concord is a fine table grape, and in wet or dry seasons, will neither rot nor mildew. The fruit is fine and early, as well as showy for market, and in addition, makes a tolerable wine. Hartford Prolific is an early table grape, and rots but little—scarcely enough to mention. It should be in every garden in the west. Delaware is a fine little grape; every one speaks high of it, and I hear no complaint, this year, of the rot affecting it. It doubtless is quite exempt in this respect.

Herbemont is a vigorous grower and profuse bearer. A four or five year old vine will make a gallon of sweet wine, is exempt from rot and mildew this year. Norton's Virginia is one of the best of our native grapes; it makes a dark wine, equal to any European wine. It is a strong grower; and when four or five years old, highly productive and not subject to rot or mildew. The wine from this grape has a very peculiar tonic or medical property, exceedingly valuable in bowel complaints; curing diarrhea at once, even in small infants. I have tried it often and can recommend it with confidence, not only for bowel complaints, but as a general tonic. For wine, the two last named stand high with all German vine growers for wine.

I have a number of other varieties under cul-

ture, but not as yet sufficiently tested to speak of them with confidence.

ONE DOZEN VINES FOR FAMILY USE.—Hartford Prolific 2; Concord 2; Herbement 1; Coleman's or White Rebecca 1; Delaware 2; Isabella 2; Catawba 2.

FOR A VINEYARD OF 2000 VINES, FOR THE TABLE.—Hartford Prolific 100; Concord 300; Delaware 200; Isabella 100; Herbement 300; Norton's Virginia 500; Catawba 500.

FOR A VINYARD OF 2000 VINES FOR WINE.—Herbemont 500; Norton's Virginia 600; Delaware 500; Catawba 400.

The soil should be spaded, trenched or subsoiled, the rows six to seven feet wide, and when trained on the German system, four feet apart in the rows; but if on trellis, eight feet. To every eight rows, a drive-way should be left twelve feet wide, to pass through with a team. Plant nothing between the rows after the third year. Cultivate with a "karst"—a kind of a hoe, used only for grape culture; keep clear of weeds; break out the suckers; stir the ground often, especially after a heavy rain, to break the crust on the surface, and you will have grapes good and large.

The vines must be pruned in November—laid down and covered with earth, and care should be had to lift them in April, before the buds break.

I shall be happy to answer any enquiries in regard to modes of pruning, etc.

Respectfully yours,

D. H. SHRODER.

—"I like your impudence," as a pretty girl said when her beau kissed her.

—Why is a newspaper like a boiled crab? Because it is read (red).

Why is the polka like bitter beer? Because there is so many hops in it.

—A poor seamstress finds it hard work to thread her way through life's wilderness.

—May our blonde beauties be looked on as forming a portion of the pale of society?

—A pretty female artist can draw the men equally with a brush and a blush.



**DIRECTIONS FOR CIDER-MAKING.**—The following extract is from the Country Gentleman, from a report on apples and their management, submitted last year by a committee of the Hampshire (Mass.) Agricultural Society, of which Mr. David Rice was Chairman:—

Good cider cannot be made from inferior, or decayed, or worm-eaten fruit. The apples should be ripe and mellow before they are ground out in the mill. They should be mixed, sour and sweet, in about equal proportions when carried to the apple heap. After the fruit is ground in the mill, the pomace should stand in the vat a day or two, being frequently stirred with a wooden shovel. Being thus brought into contact with the air, the cider will have a fine rich color, and a better flavor, acquired by the digestion of the apple skins, which contain a fragrant oil, and by chemical changes wrought in the cider proper by atmospheric influences. The cider should be stored in well-cleansed barrels or casks, and put into a dry, cool cellar. After fermentation has quite ceased, the barrels or casks should be hermetically closed. No foreign substance should ever be added to cider with the idea that it can be improved or made better thereby. Those who wish to poison their cider by chemicals will bear in mind that when they do so, their cider becomes a *medicinal tincture*, unfit for a beverage, or to use in any way unless prescribed by a physician. Cider will keep fit for use much longer if bottled soon after the vinous fermentation has ceased.

**THE GREAT NORTHERN LAKES.**—The late government surveys of the great lakes, gives the following exact measurement:

Lake Superior—greatest length, 355 miles; greatest breadth, 100 miles; mean depth, 988 feet; high above the sea, 627 feet; area, 32,000 square miles. Lake Michigan—greatest length, 300 miles; greatest breadth 109 miles; mean depth, 900 feet; high above the sea, 587 feet, area, 20,000 square miles. Lake Huron—greatest length, 209 miles, greatest breadth, 160 miles; mean depth, 500 feet; high above the sea, 574 feet; area, 20,000 square miles. Lake Erie—greatest length, 250 miles; greatest breadth, 80 miles; mean depth, 200 feet; high above the sea, 555 feet; area, 6,000 square miles. Lake Ontario—length, 130 miles; mean breadth, 65 miles; mean depth, 500 feet; area, 6,000 square miles. Total length of five lakes, 1,346 miles; total area, 84,000 square miles.

**OUR TEETH.**—They decay. Hence unseemly mouths, bad breath, imperfect mastication. Everybody regrets it. What is the cause? I reply want of cleanliness. A clean tooth never decays. The mouth is a warm place—98 deg. Particles of meat between the teeth soon decompose. Gums and teeth must suffer. Perfect cleanliness will preserve teeth to old age. How shall it be secured? Use a quill pick, and rinse the mouth after eating. Brush and castile soap every morning; the brush and simple water on

going to bed. Bestow this trifling care upon your teeth, and you will keep them and ruin the dentists. Neglect it, and you will be sorry all your lives. Children forget. Watch them. The first teeth determine the character of the second set. Give them equal care. Sugar, acids, salaratus, and hot things, are nothing when compared with food decomposing between the teeth. Mercurialization may loosen the teeth, long use may wear them out, but keep them clean and they will never decay. This advice is worth more than thousands of dollars to every boy and girl.—*Dr. Lewis*

**IMPROVEMENTS IN HOUSEKEEPING.**—It is sometimes said that there are less improvements in the art of housekeeping than any other. It is quite true that there are not enough of them, and those that are made are not generally adopted. Let us refer now to what we regard as an improvement in the little art of shelling beans. The old method making use of the thumb and fingers; then the use of a needle to prepare the pod to open readily. Now, the method is to pour upon the pods a quantity of scalding water and the beans slip very easily from the pod. By pouring scalding water on apples, the skin may be easily slipped off, and much labor saved.—*Scientific American.*

**SMALL POX.**—It should be kept distinctly before the minds of the people that vaccination is an almost perfect preventive of small pox until the age of puberty, (say fifteen), but after that time it becomes less and less efficacious until twenty-five, when the system becomes less susceptible to the disease up to thirty-five, when the predisposition to small pox seems to die out altogether. The specific inference is that every child ought to be re-vaccinated on entering the fifteenth year. To show the preventive power of vaccination, statistics prove that before vaccination, or even inoculation was practiced or known in Boston, to-wit: 1721, (the year of its first trial in England by Lady Mary Wortley Montague on her own daughter), one half of the entire population lay sick of the disease at the same time, and one out of every twenty-seven died of it—which, at the same rate, would kill over thirty thousand persons in New York city alone, while the total deaths from all causes in a single year were less than twenty-three thousand. In 1792, forty-six per cent—forty-six persons out of every hundred—in Boston had small pox at the same time. But a few years later, when vaccination was generally practiced, many city physicians did not see a single case of small pox in twenty months; and during a period of twenty-eight years, less than three persons a year died of small pox in Boston.—*Hall's Journal of Health.*

—Most persons choose their friends as they do other useful animals, preferring those from whom they expect the most service.

From the Atlantic Monthly.  
**The Battle of Autumn.**

BY SOHN G. WHITTIER.

The flags of warlike storm-birds fly,  
 The charging trumpets blow;  
 Yet rolls no thunder in the sky,  
 No earthquake strives below.

And, calm and patient, Nature keeps  
 Her ancient promise well,  
 Though o'er her bloom and greenness sweeps  
 The battles breath of hell.

And still she walks in golden hours  
 Through harvest-happy farms,  
 And still she wears her fruits and flowers  
 Like jewels on her arms.

What means the gladness of the plain,  
 This joy of eve and morn,  
 The mirth that shakes the beard of grain  
 And yellow locks of corn?

Ah! eyes may well be full of tears  
 And hearts with hate are hot;  
 But even-paced come round the years,  
 And Nature changes not.

She meets with smiles our bitter grief,  
 With songs our groans of pain;  
 She mocks with tint of flower and leaf  
 The warfield's crimson stain.

Still, in the cannon's pause, we hear  
 Her sweet thanks-giving psalm;  
 Too near to God for doubt or fear,  
 She shares the eternal calm.

She knows the seed lies safe below  
 The fires that blast and burn;  
 For all the tears of blood we sow  
 She waits the rich return.

She sees with clearer eyes than ours  
 The good of suffering born—  
 The hearts that blossom like her flowers  
 And ripen like her corn.

Oh, give to us, in times like these,  
 The vision of her eyes;  
 And make her fields and fruited trees  
 Our golden prophecies!

Oh, give to us her finer ear!  
 Above this stormy din,  
 We, too, would hear the bells of cheer  
 Ring peace and freedom in.

**THE TIME TO TRAIN COLTS.**—Great diversity of opinion exists among intelligent horsemen as to the best age at which to commence the training of colts. Some people are of the opinion that they should not be driven in harness, or very much used, until from three to five years old, while others contend that their training should commence almost with their very existence, and, like children, their education should begin in their infancy, and that, when judiciously and carefully performed, no damage will occur from the training of these animals, however young. A colt should not be required to

do the work of a fully matured horse, any more than a boy should be expected to do that of a man. When used according to their age and strength, it will be a benefit in growth and development of muscle, rather than an injury. If the training is carelessly and injudiciously performed, the animal may be injured at any age, however mature. All this is undoubtedly true, and at this day no humane breeder of these intelligent and noble animals will suffer a two-legged brute to have the care and management, training or using of horse-flesh. How often have we seen, bearing the semblance and claiming the attributes of men, exhibiting in the use of horses, and especially green ones, less intelligence and feeling than the brutes they undertake to train, or "break," as they call it, and wish that the two could be made to change places.

Thanks to Rarey and the progress of the age in which we live, extreme cruelty to animals, and especially to noble horses, is more surely punished at this day than many other offences against the peace and dignity of the State, made penal by the statute, and scenes of this kind are but seldom witnessed, yet the cruel disposition still remains in some men, who should never have the care and management of animals of a really higher order of intelligence than themselves. Some writers have said that there is no surer index of the degree of education and refinement of a people or nation than the treatment of their horses. This is in a sense true, but we Americans would hardly be willing to have our education and refinement measured by that rule, since we should suffer in comparison with the wandering Arabs of the desert, who are proverbial all over the world for their noble horses and their attachment to them, suffering thirst and hunger themselves rather than deprive the animals of needed food or drink. They will part with everything else dear to them—gold, and even life itself, rather than with a favorite mare.—(Stock Journal.)

**RICH SOIL—RATHER.**—The editor of the American Stock Journal, says: "We are told, too, a good story, which is no doubt true, of a man who has actually sued and made to pay damages in a court of law in Iowa, within the last two years, for leaving a quantity of manure on another's garden! The offender had hired a stable and kept several horses, and deposited the manure on a neighboring lot used as a garden. The case was tried before a judge recently from New England, who was satisfied by the evidence that the land was rich enough without the manure, and that the manure caused a great growth of weeds, which made far more labor necessary to cultivate the crops!"

**DR.** The Chicago Tribune says a gang of one hundred K. G. C.'s recently attempted to lynch Dr. Owens, of Williamson County, Illinois, whom they believed to be the author of a recent expose of their designs. The Doctor escaped by concealing himself in the house of a friend.

## THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP, EDITOR.

SPRINGFIELD, NOVEMBER, 1862.

### Editor's Table.

"November's surley blast  
Laid field and forest bare."

The above is not quite true of our vast corn-fields, that still rustle with the golden ears. Nearly all other crops are housed—the manure heap should not be forgotten, and it is yet time to set out trees. Do not put off your tree setting, but set them now if possible. Bank them up well with earth and they will stand the winter unharmed. Look to the drainage of your winter wheat. Don't have your cattle and hogs wallow in miry yards. And if you grow any corn, see that it is housed. The corn crop is light at best, and you will need it all—so take good care of it. Cellars will need banking up—stables put in order, and stock of all kinds looked after; for a cold autumn storm will never fatten stock of any kind, however much exposed to it.

(From the Country Gentleman and Cultivator.)

#### Cow Milker.

L. TUCKER & SON.—Observing an inquiry in the number of the Co. GENT. for October 16th, from a correspondent at Deerfield, Mass., about the patent cow milker. I reply, that, as agent for the manufacturers, I have been selling these cow milkers occasionally, during the past season, and expect to have the "improved machines," which received a premium and attracted so much attention at the late International exhibition, for sale in good season for the early spring trade.

It was only a short time before the patentee left this country to attend the exhibition, that

he perfected the "cow milker" so as to be able to recommend it with entire confidence.

He took with him one hundred machines, which, after a most thorough trial in the best cheese and dairy districts of England, proved an entire success. The patent was sold, (the United States only being reserved,) for \$25,000 cash, with a royalty of \$5.00 on each machine to be made and sold.

Between four and five thousand were disposed of before one of the partners left, the other one remaining a short time to superintend for the purchaser of the patent the manufacture of 10 000 milkers.

This patent cow milker, rather ridiculed at first, with inquiry "what is coming next?" having passed the ordeal and close practical examination and trial of thousands of farmers in the best dairy districts of England, may be now considered a fixed "American institution,"

It consists of a simple but fixed attachment on the side of the regular milk bucket, the India rubber valves of which, operating by simple suction, are worked by a couple of levers with the two hands, till the last drop of milk is drawn from the udder. The teats are inserted in India rubber tubes or cups, which are adjustable to suit different udders. It is contended that the milk is drawn out more thoroughly than it possibly can be by hand, and also with more ease to the cow, and in a shorter time.

There has been cases where unruly cows, who would not stand to be milked by hand, quietly submit to this last scientific process, which puzzle them a little at first, but before recovering from their surprise their milk is all drawn into the bucket.

It is well known that many fine cows are ruined by bad milking, and the extreme difficulty of procuring good milkers is felt by every dairyman. This invention, therefore supplies what wants, and it is the intention to have them manufactured on a large scale, so as to supply every section of the country. PASCAL MORRIS.

With all due reference to Mr. Morris, we have little faith in this machine, as we believe that it will ruin any cow that it is applied to, in the course of a few weeks, making her leak her milk. We do not propose to discuss the point, for all that we could say would have but little influence in preventing it being extensively sold; nor would we interpose any obstacle to its thorough trial, for it is possible that it may yet be so modified that it may become a practical reality, and we would call attention to this defect, and

caution farmers to watch its effect in the direction mentioned.

**HAND ENGINE.**—H. M. Austin, of Chicago, has sent us one of these valuable implements. The wife can use it to wash down the windows, the gardener uses it to syringe the plants in the green house; to wash off the shrubbery; and the boys delight to fire into the nests of worms on the apple trees; in fact, it has become an indispensable article of household furniture—even for washing potatoes and dishes with almost as much ease as an ordinary “biddy.” One person manages it with ease, but in case of a fire, it becomes invaluable. It is generally the case that when a fire is first discovered, that a pail full of water well directed, will put it out if rightly applied, but it is difficult to apply it from the pail, and the fire soon spreads beyond control. In all such cases, this little engine would prove effectual, for the water can be forced around the flues, behind the chimney, or other secret place, where fires delight to kindle. If the fire takes in the roof, with this aid, you can throw on the water before you could get up a ladder, even if it was at hand. As a preventative of fires, it had ought to be in every house, and kept ready for use. The cost is but a trifle, and it will save thousands of dollars. The gardener will find it valuable, the goose-keeper will be pleased with it, the fruit grower cannot do without it, and the farmer may often save his buildings from the devouring element by its use.

**AMERICAN POMOLOGICAL SOCIETY.**—The undersigned, President of the American Pomological Society, congratulates the cultivators of fruit and the public generally upon the gratifying progress which the science of Pomology has made in our country. This advance is mainly to be attributed to the establishment and influence of Horticultural and Pomological Societies. Prominent among these is the American Pomological Society, embracing, as it does, within its organization all the States and territories of the union, the Canadas and the eastern British Provinces. This association held its ninth session in the city of Boston, during the last month. The attendance was large, embracing nearly two hundred delegates and members, and in which fourteen States and territories were represented. The contributions of fruit were numerous, and the discussions of a highly interesting character. These, like the former proceedings, are to be

published in the volumes of the Society, and in which will also appear the new catalogue of fruits, together with a list of the various States and districts to which they are best adapted.

All persons who are desirous of obtaining these Transactions, are respectfully solicited to become members of the Society, by forwarding to Thomas P. James, Esq., Treasurer, Philadelphia, or to the undersigned, at Boston, the requisite fees. Ten dollars constitutes a life, and two dollars a biennial membership. Life members will be furnished, as far as possible, with the back volumes of the Society's publications.

Persons desirous of responding to this circular will please do so immediately, that their names may appear in the forthcoming volume.

MARSHALL P. WILDER,  
*Boston Mass., Oct. 25, 1862. President.*

**CUTTING BACK TREES.**—We have a note from Col. Bainbridge, now of Desota, Mo., late of South Pass, and former owner of the magnificent fruit farm of the Bro. Evans, just east of the station at South Pass, (Cobden). The Col. is making a new fruit farm at his new home, forty-two miles south of St. Louis, on the Iron Mountain Railroad. He has set out 7000 fruit trees, 4000 of them in 1861,—the other 3000 the past spring. Most of these peach he cut off all of the side branches and the trunk to within two to three feet of the ground. He has not lost half a dozen trees in the entire setting, and now has the finest growth that he has ever seen of newly set trees, and those of the second year are most magnificent.


**PLANTING IN BLOCKS—EACH VARIETY.**—In setting out his orchard, the Col. has set each variety by itself, so as to facilitate the picking. In a peach orchard this is important, and will save a large amount of labor in gathering. We have no doubt that the Col. will soon have one of the largest fruit farms in Missouri.

☞ The Ohio Valley Farmer says:

“It is not certain that we shall issue any more numbers till the war is over.”

Our Ohio neighbors have been particularly unfortunate. One reason, we think, has operated against them, is their attempt to make newspapers instead of agricultural journals, thus coming in competition with the blanket weekly and daily papers filled with war news.

**MEXICAN MUSTANG LINIMENT.**—The famous Mustang Liniment which has received such a high reputation for curing sprains and chilblains, is composed of petroleum, aqua ammonia and brandy, mixed together in equal parts by measure. Refined petroleum is very excellent for mild chilblains without the admixture of any other ingredient, but the mixture with ammonia and brandy is more stimulating. It is applied by gentle rubbing. The human hand slightly warmed before a fire is the best agent.—*Ex.*

 Steam plows are getting into quite extensive use in Great Britain, as we infer from the fact, which we find in one of our foreign exchanges, that as many as 129 of Fowler's steam plow and grubber are at work in England alone. The amount of work done by one of these plows seems to be about six acres in a day of ten hours, and the cost is estimated at from about \$1.50 to nearly \$2 per acre. The price of Fowler's plow is £825, or say \$4,000, and with grubber £885.—*Ex.*

**AWARDS AT THE REAPER TRIAL.**—The following awards of premiums on reapers, mowers and headers were made by the Executive Committee of the Illinois State Agricultural Society, after trial of the same in the fields near Dixon, Ills., during the harvest of 1862, to-wit :

For the best combined reaper and mower, to John P. Man-ny, of Bockford, Winnebago county, Ills.....	Diploma and \$75 00
For the best independent reaper, to Walter A. Wood, of Hoosick Falls, New York, on his self-raker.....	Diploma and \$50 00
For the best independent mower to E. Ball, of Canton, Ohio, on his two-horse mower.....	Diploma and \$50 00
For the best heading machine, Barber, Hawley & Co., of Pekin, Ills., on Haines' harvester.....	Diploma and \$50 00

As there was but one entry of one-horse mowers, no premium was awarded, but the implement, exhibited by Walter A. Wood, of Hoosick Falls, New York, was regarded with much interest, was carefully tested and highly commended to those desiring a one-horse machine.

So also with grain-binders; but one was exhibited, that by H. M. Burson, which was operated in presence of the committee, and, together with every other implement exhibited at the trial, will receive its proper notice in the committee's report. The regular report may not be ready for publication until after the annual mee-

ting of the Board in January 1863. The data from which it must be made up are not yet in possession of the Secretary.—*Journal of the Illinois State Agricultural Society.*

**CHESTNUTS.**—Gov. Wood, of Quincy, has just placed on our table a quantity of these in fine condition for planting, having been picked from the trees on his grounds yesterday, (7th Oct). He now has in bearing the third generation of trees planted by himself, and from the oldest, will get about two bushels of nuts each. We wonder some of our nurserymen do not secure his entire crop and grow the trees in quantity for sale. For many purposes, and especially fencing, there is no better timber. It grows rapidly, comes into bearing at about ten years old, is a beautiful ornamental tree, and, withal, profitable in orchard. If the young trees could be had, nursery-grown and in condition to be transplanted safely, it seems to us the demand would be large.—*Ibid.*

**SHEEP AND WOOL.**—Great activity prevails in the sheep and wool markets just now. Cotton and cotton fabrics are dear and rising. The wool from the backs of 5,000,000 of sheep will be annually required for even our present army. How many years this demand is to continue, depends, we think, upon the energy and right use of means by the President. Stimulated by the present and prospective high price of wool and woolen fabrics, our western farmers are increasing their flocks beyond precedent. Go on, gentlemen, there is no Multicalis, Tulip or other "Will-o'-the-wisp" leading this movement. The army of 1,000,000 men, the militia of the several States soon to be organized and partly uniformed, besides the ordinary consumption by the families of the country, render perfectly certain remunerating prices.—*Ibid.*

**A NEW ENEMY TO THE ARTICHOKE.**—Mr. Chas. Dement, of Lee county, of whose field of artichokes we have often spoken, informs us that he has discovered a small, white worm, about half an inch long, depredating upon the tubers and foot of the stalk of this plant, to such an extent as to nearly destroy the value of the crop. It is the first he has ever seen of this grub. It is altogether impossible for him to supply tubers to applicants on account of their depredations. It is the first enemy to this crop of which we have heard.—*Prairie Farmer.*



**CATALOGUES RECEIVED.**—Catalogue of the North-Western University, at Evanston. This institution is in a highly prosperous condition. Enquiries should be directed to Henry S. Noyes, Acting President, Evanston, Ills.

*Highland Nurseries.*—E. C. Frost, Highland Nurseries, postoffice, N. Y.

*Columbus Nurseries.*—Batcham, Hanford & Co., Columbus Ohio. A large and extensive list. The fruit list is especially adapted to the north-west.

*Ellwanger & Barry*—Rochester, N. Y.; probably the largest stock of trees and plants in the world.

*E. Moody & Son*—Lockport, N. Y.; a large lot of pears at very low rates. Also fruit trees and stocks for nurserymen.

*Prince & Co's*—Select list of bulbous roots, peonias, etc. A very extensive collection of both old and new sorts, said to be the most extensive in the Union. Also Prince's list of strawberries, valuable to all cultivators of this valuable fruit; also his list of native and foreign grapes.

Darrow's catalogue of colored plates of fruits and flowers, Rochester, N. Y. We have two books of these plates. They are valuable to nurserymen and tree dealers.

*Genesee Valley Nurseries*—Frost & Co., Rochester, N. Y.; one of the largest in the United States, and from which we have purchased our pear trees the past two years. These we purchase at two years old, and grow them two years in our own grounds, when they are ready to send out. Our open winters are not well adapted to budding the pear, a large part of the buds are winter killed.

*Raysville Nursery*—John C. Teas, Raysville, Ind.; a large collection of trees and plants. We had the pleasure of meeting the proprietor at the late fair in Chicago.

*Isaac Pullen*, Hightown, N. J.—From this establishment we have received over 35,000 silver maple seedlings. Mr. P. has a large and select stock of peach trees, which our tree planters will do well to order from.

*Persimmon Nursery*—Arthur Bryant & Son, Princeton, Ill. This is our oldest and one of the best nurseries in the State.

*Faulkner Nurseries*—Wm. Ramsden & Co., Danville, N. Y.; offers a large stock of fruit trees.

*Bronson, Merrell & Hammond*—Geneva, N. Y.; fruit trees and Osier willow cuttings.

*Rhode's Saper Phosphate of Lime*—For sale by A. H. Hovey, 73 Lake street, Chicago. This is the first of the kind offered for sale in the west.

*Livingston Nurseries*—H. Southwork & Son, Danville, N. Y.; fruit trees.

*Waukegan Nurseries*—R. Douglass, Waukegan Ill.; fruit and ornamental trees and seedling evergreens. A well grown stock and at low rates.

*Metcalf's Key to Bee Keeping*, from D. R. Williams, Chicago.—This is an interesting and valuable treatise on bee keeping. Price, 35 cts.

*Evergreen Catalogue*—Of J. P. Lovikin & Co., New Castle, Canada West; worthy of the attention of our nurserymen.

*Humboldt Nurseries*—Link & Co., Toledo, O.; ornamental trees and plants.

*Woodburn Nurseries*—J. Huggins. This nursery is well known in central and southern Ills.

*River Bank Nurseries*—Ramsdell & Loud, Adrian, Mich. This is one of the largest of the Michigan nurseries; fruits all fine.

ORATION OF GEN. WALBRIDGE, AT COOPER INSTITUTE, N. Y., July 4th, 1862.—A patriotic and timely address.

MEDICAL EXAMINER, Chicago, for October—A valuable number. The first chapter should be read by all our young people.

GARDENER'S MONTHLY—Some signs of this valuable paper coming to an untimely end, but we hope it will live a thousand years, as it is among the most valued of our exchanges, and fills a void that no other paper can so well supply.

HORTICULTURIST.—Since this paper has become useful as well as ornamental, its course has been upward and onward, and never as prosperous as now.

THE OHIO FARMER has been suspended, as also "Field Notes." Col. Harris continues the Ohio Cultivator, the only agricultural paper now in that State.

## Winter Meeting of the State Horticultural Society.

As will be seen below, this society will meet in Bloomington the 2d of next month.

The programme was made up at the last meeting, and on the whole is a very good one; but since that time several new subjects have attracted the attention of the members. Among the most prominent is that of the White Willow, for fencing, shade, shelter, fuel and economical purposes. This subject must necessarily occupy much of the time, and crowd out some of the subjects set down in the programme. Railroad men will be deeply interested in this enquiry, for they are interested in something that will keep the deep snow drifts from the track, a future supply of fuel and ties.

A list of fruits for commercial orchards is another subject that will come up, demanding careful attention. The idea of a long list for general culture has been ignored and no more time need be wasted on it. Orchardists are now disposed to plant few kinds, but those must be of the best paying ones.

## Illinois Horticultural Society.

PROGRAMME OF EXERCISES FOR WINTER MEETING.

Commencing Dec. 2d, at 10 A. M., at Bloomington.

TO CONTINUE FOUR DAYS.

### FIRST DAY.

#### *Morning Exercises—Essays and Addresses.*

Address by the President, O. B. Galusha.

#### *Essays on Apples.*

S. G. Minkler, Specie Grove.  
F. K. Phoenix, Bloomington.  
G. H. Baker, Cobden.

#### *Afternoon Exercises—Essays on Pears.*

Robert Douglas, Waukegan.  
Verry Aldrich, Tiskilwa.  
C. A. Montross, Centralia.

#### *Evening Exercises—Essays on Peaches.*

James E. Starr, Alton.  
——— Clark, South Pass.

### SECOND DAY.

#### *Morning Exercises—on Grapes.*

C. N. Andrews, Rockford.  
H. L. Brush, Ottawa.  
C. H. Rosenstiel, Freeport, on Foreign Grapes.

#### *Afternoon Exercises—Essays on Small Fruits. Strawberries and Blackberries.*

H. M. Kidder, Evanston, on Strawberries.  
H. Shaw, Tremont, on Strawberries.  
Chas. Merritt, Battle Creek, Mich., Blackberries.  
A. Crosby, Centralia, on Blackberries.

#### *Evening Exercises—Essays on Small Fruits, Raspberries, &c.*

Chas. Kennicott, Sandoval, on Small Fruits of Egypt.  
H. M. Kidder, on Raspberries.  
C. H. Rosenstiel, on Raspberries.  
J. Asa Kennicott, Chicago, Ornamental Fruit Trees.

#### *Question for Discussion on the Second Day, P. M.:*

Resolved, that this society disapproves the extensive cultivation of fruit for the purpose of manufacturing for intoxicating drinks.

### THIRD DAY.

#### *Morning Exercises—Essays on Small Fruits.*

Chas. Hamilton, Henry, on Gooseberries.  
J. T. Little, Dixon, Currants.  
Jas. Wakeman, Cottage Hill, on Cherries.  
C. H. Rosenstiel, Freeport, on Plums, Prunes and cherries.

#### *Afternoon Exercises—Essays on Evergreens, &c.*

S. Edwards, LaMoille, on Evergreens.  
M. L. Dunlap, Champaign, on Screens, &c.  
C. R. Overman, on Landscape Gardening.  
C. T. Chase, Chicago, Beautifying our Homes.  
Election of officers.

#### *Evening Exercises—Miscellaneous Essays.*

J. Periam, Hope, Kitchen and Market Gardening.  
G. W. Miner, Mackinaw, Forest Trees.  
Dr. Geo. Haskell, Fruits of Michigan.

### FOURTH DAY.

#### *Morning Exercises—Miscellaneous Essays.*

J. A. Warder, Cincinnati, optional.  
B. D. Walsh, Rock Island, Entomology.  
P. R. Hoy, Racine, Wis., optional.

The essays and addresses will be followed by discussions on the topics treated of.

#### *Evening—A Social Re-Union.*

The citizens of Bloomington, with their usual liberality, offer to the members the hospitalities of their homes.

By order of the President,  
C. T. CHASE, Cor. Secretary.

We will say in this connection that the Illinois Central Railroad, with its accustomed liberality to this and kindred interests, will return free all members of the society residing along the line of their road, and being in attendance in the early part of the session, in time to obtain the passes from the Chicago office. Our friends should bear this in mind and be on hand in time to have

their names sent to Chicago for the passes. The object of this is to prevent imposition, and confining the passes to those actually in attendance. It is our intention to make a full report of this meeting, as we are satisfied that it will be the most important one ever held in the Northwest.

**FINE APPLES.**—Mr. James Smith of the Des Moines Nursery, hands us several varieties of his fall and winter apples. Among those of unusual size for their varieties, we find the Northern Spy, Cracking and Jonathan. The Cracking is now in season, and is a cracking good apple—no mistake. Mr. Smith regards the Cracking as one of the very best fall apples in his collection. The tree is a good bearer and the quality of the fruit good enough.

He considers the Northern Spy of no account. The tree is a good grower, but produces little or no fruit. The Jonathan is a special favorite, and we think would be with any one who could see his trees just before harvest.—*Iowa Homestead.*

—An apple that will do well at Des Moines should be valuable in Northern Illinois. Will not Mr. Smith bring or send some of the Cracking to the Bloomington meeting for distribution? This hint we will also throw out to others who have a superior market apple.

**ILLINOIS COTTON.**—Some time since we received a sample of Illinois cotton, raised this year on the farm of Messrs. Stewart & Co., who reside at Clear Creek Landing, Alexander county, thirty-six miles north of Cairo, on the Mississippi bottoms. Not being a judge of the article, we forwarded a portion of the sample to a large and well known cotton manufacturing firm in Providence, R. I. From a member of that firm we have received the following response:

PROVIDENCE, Oct. 27, 1862.

*My Dear Sir:*—I received your letter of the 18th, and have examined and shown to others the sample of Illinois cotton you enclosed. I can only say, if such cotton as this sample can be produced in Illinois, all that is required is quantity, to keep manufacturers from going to the so-called Southern Confederacy for supplies. It has a woolly appearance, like much upland cotton, but it will make handsome goods. It is now worth about 60 cents per pound.—*Chicago Tribune.*

We saw a sample of cotton raised on the farm of M. L. Dunlap, three miles south of this place, which we have no doubt is not inferior to that spoken of so favorably by the

Samples have been secured from Mr. Dunlap, and are being distributed over the country. If cotton can be successfully cultivated in this county, Mr. Dunlap is bound that it shall be known.—*Union Champaign.*

**Thos. E. Hill, Esq.,** sends us some fine specimens of Illinois cotton, grown upon the farm of M. L. Dunlap, in Champaign county, 130 miles south of Chicago. In regard to Mr. Dunlap's crop, Mr. Hill says he planted three quarters of an acre the 13th of last May, as an experiment. The season has been unusually cold and unfavorable for its production, and yet it will ripen and he will have a fair crop.—*Tribune.*

**GRUB IN THE HEAD OF SHEEP.**—Dr. Dadd, in a communication to the *Prairie Farmer*, says the only way to prevent grub in the head of sheep, is to put plenty of wholesome "grub" in the stomach of the animal—and that it is a well known fact, that sheep properly attended to, well fed and housed, are never troubled with the parasite known as the grub.

**COOK'S NURSERY.**—In this number will be found the card of the above nursery, now pretty well known throughout our state. We have often had occasion to order from this establishment, and always got fine well grown plants and trees. His grape vines are remarkably well grown. Mr. C. cuts back nearly all his trees at a year old, and thus obtains a uniform, thrifty and straight growth, the best that we have seen, a practice that we cannot too highly commend, and one that, in the hurry and want of help, we have too much neglected in our own grounds. We can assure our readers that Mr. C. will deal fairly by them.

**THE RURAL ANNUAL.**—This booklet emanating from the office of the *Genesee Farmer*, is a most valuable hand book. It treats of tree planting, flowers, domestic wines, culture of pears, of cereals, cider making, ect., work really worth a dollar, but sold at the low price of twenty-five cents.

Address Joseph Harris, Rochester.

**FRUIT IN NEW YORK.**—The present has certainly been a very productive fruit season. Apples and pears are selling at high prices, and are in great demand. The season is so early and so long in the season, that it is a rare occurrence.

**APPLE TREES BY THE MILLION.**—In the advertisement of O. B. Galusha the typo made a slight alteration in the copy, by substituting million for thousand in connection with the price of trees. Mr. G. will hardly sell them at eighty dollars the million, and any person ordering that quantity and remitting the amount will be disappointed. We, therefore, have the types corrected lest some of our tree planters order by the million, and bring our friend to grief.

**COTTON CULTURE.**—We have demonstrated that cotton can be successfully grown as far north as 40°, and that in all the State south of that point, it can be grown at a good profit, and we hope to see thousands of acres grown next season. In our next we shall have considerable to say under this head. We would sooner risk cotton than wheat on this farm. We have learned much in regard to its culture, and have more to learn. One illusion is dispelled; it is not so liable to damage by frost as supposed, and can be planted two weeks earlier than our planting this year, which was on the 13th of May. Ten years hence and the prairie State will lead all the other States in the value of her products. Corn, wheat, cotton, tobacco, fruits, castor beans and hemp, shall go over her railroads—the products of her soil. People may talk of the high price of prairie lands, but at present prices, they are the cheapest in the world, and the immense tracts now owned by the Illinois Central and Chicago and Alton Railroads, will all find ready purchasers. Farming is again becoming profitable, and so soon as the rebellion is disposed of, the demand for lands will be large.

It is estimated that Illinois will produce 20,000 bales of cotton this year, and the crop is now gathering. The State could grow 500,000 bales profitably. The sorghum crop in Illinois is estimated to amount to \$1,000,000 in value the present year.—Ex.

According to a statistical article in the Scientific American, the number of sewing machines annually manufactured in this country is seventy thousand. Twelve or fourteen establishments are engaged in the business.

The small-pox has made its appearance at Cairo. Seventeen cases were reported by Brigade Surgeon Wardner.

There is a beautiful mystery about infancy and childhood. It is natural for us to gaze upon a gentle child with feelings of love, and something of reverence and wonder.

Once on the track of disobedience, a child cannot get off without the aid of a switch.

Since the demand for lint became so great many of the very best ladies of the nation have got into a scrape.

Remember, young ladies, that oranges are not apt to be prized after being squeezed a few times.

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## HOVEY'S AGRICULTURAL WAREHOUSE AND SEED STORE.

Has one of the best selected stock of implements and seeds to be found in the West.

A. H. HOVEY,  
Novt 1862 No. 73, Lake st., Chicago, Ill.

### Publishers' Special Notices.

**AGENTS.**—We do not appoint any agents; all are voluntary. Any person so disposed, can act as agent in any place.

**ENLARGE YOUR CLUB.**—Will not the friends of the ILLINOIS FARMER inquire how many copies of the FARMER are taken at their respective offices, and pass around among those who ought to have their names added to the list? Our terms are so low to clubs of ten and twenty that we ought to have one or the other made up at every office in the State, and at every office in Central Illinois, one of twenty or more. Will our friends, and the friends of practical agriculture see to it, and thus lay us under renewed obligations?

**TO SINGLE SUBSCRIBERS.**—You receive the only copy of the FARMER that goes to your post office. Can you not send one, two, three or more new subscribers, without any trouble? Try. Sample numbers, &c., sent free.

**DRAFTS.**—Those remitting us large amounts of money, will please send us drafts on Springfield or Chicago, less the exchange. If you send cash in a letter, be sure that is well sealed and well directed, to Bailhache & Baker, Springfield, Illinois.

**THE FARMER AS A PRESENT.**—Any of our subscribers who wish to make a present of the ILLINOIS FARMER for 1861, can have it at the lowest club rates, when sent out of the State. For fifty cents you can treat your eastern friends to a western agricultural paper. In no way can you invest that amount to so good advantage to emigration.


**SEND NOW.**—Any person who remits pay for a club of ten or fifteen, or any other number at the specified rates for such clubs, can afterwards add to the clubs, and take advantage of the reduction. Thus a person sending us five subscribers and three dollars, can afterwards send us three dollars more and receive six copies.


**TO THE CASUAL READER.**—This and other numbers of the ILLINOIS FARMER will be sent to many persons who now see it for the first time. Will they not examine it, and if they like it, subscribe for it, and ask their neighbors to subscribe? Sample numbers, prospectuses, etc., sent free to all applicants. See terms elsewhere.


**HOW TO OBTAIN SUBSCRIBERS.**—The best way is to send for sample numbers. Any young man by canvassing his neighborhood, can easily make up a club of five, ten or twenty, but no time should be lost in doing so, for your neighbors


may send east for their paper which, though valuable there, is much less so here, the difference of soil and climate putting them out of their reckoning when attempting to teach us western farming.

**HOW TO HELP.**—The friends of the ILLINOIS FARMER will find a prospectus in another column. We desire to suggest a few ways in which they can use it to advantage. 1. Show the FARMER to those who are unacquainted with it, and tell them what you think of it. 2. Send for prospectuses, and put them into the hands of those who will use them, and place posters where farmers will see them. 3. Get postmasters interested. They see everybody, and are efficient workers. 4. Send us the names of persons in your town to whom we can send prospectuses and sample numbers. 5. Begin *now*, before the agents of eastern papers get up their clubs. This last hint is especially important. Let us hear from you soon. See terms elsewhere.

 Clubs may be composed of persons in all parts of the United States. It will be the same to the publishers if they send papers to one or a hundred post offices. Additions made at any time at club rates. We mail by printed slips, which are so cheaply placed on the papers, that it matters little whether they go to one or a dozen offices.

 Correspondents will please be particular to give the name of the post office, county and State.

 Specimen numbers will be sent gratis, upon application

 Address

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A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

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BY BAILHACHE & BAKER,

AND IS

EDITED BY M. L. DUNLAP,

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August, 1862. tf



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JOURNAL OF THE  
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The Executive Committee of the Illinois State Agricultural Society believe the time has arrived, when the publication of a Journal of the Society is imperatively demanded. Pursuant, therefore, to the duty with which they are charged by the 5th section of the Constitution of said Society, revised and adopted by the meeting of delegates from County Agricultural Societies, held on the Fair Grounds, at Jacksonville, Sept., 1860, they have made the necessary arrangements for the issue of such Journal, monthly, commencing with January, 1862.

Each number will contain at least 32 pages (octavo) of reading matter, composed principally of such portions of the Transactions of the State and County Societies, and communications on the subjects of

AGRICULTURE IN ALL ITS BRANCHES, Mechanics and Natural History, as may require early publication.

*All premiums offered and awards made by the State Society will appear in its columns.*

All persons, and especially Secretfries and other officers of County Societies, are respectfully requested to communicate to the editor any matters of general interest to the industrial classes, as may from time to time arise in their respective localities.

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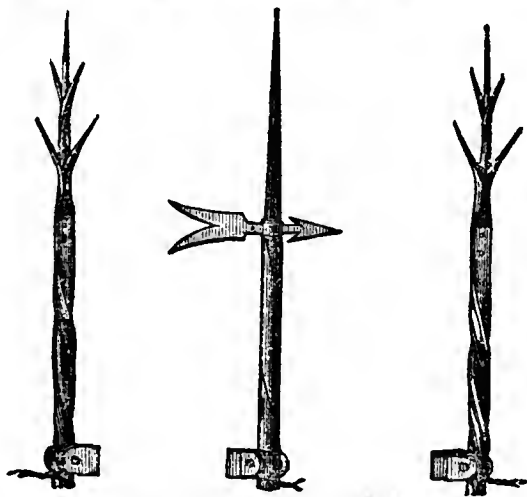
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P. S.—Omnibuses pass the nurseries every hour—  
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# THE ILLINOIS FARMER.

VOL. VII.

SPRINGFIELD, DEC., 1862.

NO. 15.

## December.

Another year will soon be numbered with the past—a year filled with stirring events—a great era in the history of the country. What the final result may be, is not for us to know. Until the time for its fulfilment, we can only speculate on the issue, and like all speculators, we fancy that our vision is a clear one, looking into the dark and dimly-lighted future, through the fogs and mists of the past.

## WHAT WE SEE.

Looking down the next decade of years, we see great changes in the rural economy of the State; belts of trees encircling the farms, great commercial orchards loaded with choice fruit; vineyards rich with the clustering grape; patches of tobacco on nearly every homestead; fields of cotton everywhere south of the 40th parallel; the cereal grains yielding more profusely and in larger breadth; the great corn fields changed to a mixed husbandry; the great stretches of prairie, now used by the herdsman without charge—dotted over with newly enclosed farms, and everywhere the people are prosperous, because industrious, and that industry repaid to a reasonable extent. The great Pacific railway will then be in process of building—preparing the highway over which shall trundle the riches of both the old world and the new. The east and the west will want the products of our soil. Our enormous water power and vast coal mines will call hither manufacturers, and we shall not only be a great agricultural, but a great manufacturing State.

The waters of the Fox, the Rock and the Mississippi, will turn thousands of spindless; and the music of busy wheels shall give a new impulse to the industry of the State. The iron and copper of Lake Superior shall come by lake and river, to be melted and worked into articles of use. The south will have become prosperous under the rule of free institutions and of paid labor, competing in a healthy competition with the northern border States and other parts of the world, in the supply of cotton for the worlds cheap clothing,—with the north for molasses, sugar, tobacco and hemp. At the end of this decade, we see the cotton States more prosperous than ever before, for a large infusion of northern energy, of northern tact and of northern skill, will be diffused through the bankrupt mass, reinvigorating and re-enlivening the disordered material—brains will everywhere be in demand to make labor intelligent and useful. The picture looks bright, even through the smoke of battle; for beyond it rises the down-trodden Saxon, crushed beneath a system that has made labor degrading. He that said “in sweat shall thou earn thy bread,” by that edict made labor honorable and imperative as well as universal.

In the duration of the war, we have not been deceived; for great changes are not the result of a day; step by step, we are approaching the end; slow, yet sure—but no less certain of the result. We are no politician, but look upon passing events with a cool and dispassionate vision.

The war has reached its 'culminating point, and slowly it will fall back by the



light of burning houses and ruined plantations, leading out towards Mexico, where the base spirits that set the ball in motion will overrun that unfortunate country. We have lost no faith in the progress of the age, but are prepared to see these wonderful changes follow each other in quick succession. It is but a few years since, we read of railways constructed in England for the purpose of passenger traffic, and our newspapers discussing the propriety of their practicability in the United States. A little later and we rode from Schenectada to Albany, a distance of sixteen miles in coaches partly by steam and partly by horse-power. These coaches held some half a dozen passengers each, the conductor passing along on the outside of the line of coaches to collect the tickets, which were invariably paid for before you were allowed to take a seat.

This was hailed as a wonderful stride in the world's progress; but now, people cease to wonder at the net-work of iron that is laid over the then wild prairies. If these decades have accomplished so much, why may we not expect to see in the next what we have predicted? We have the appliances and the will to do it.

### The Horse in the Stable.

If one would have a good horse on the road, he must take care of him in the stable. To the man that is fond of that noble animal, the horse, the stable is no mean place which is the home of his faithful servant. A part of the secret of the differences among horses, may be found in the different ways they are treated in the stable.

This building need not have the embellishment of architecture, nor be made air-tight, but it should be comfortable—made to promote the comfort of its occupant. It should be well ventilated, by allowing a draught of fresh air constantly to pass through it, especially during the warmer months. Do not allow the air of the stable to be made offensive and unhealthy by the presence of ammonia escaping from the excrements. Keep the air in your stable as sweet as it is in your own house; for such is necessary for the health of a horse.

Plaster of paris used freely about the stable is quite desirable—both on the score of comfort and profit. It is cruel to foster a noble horse in a stable where the air is suffocating on account of noxious gases constantly generating and es-

caping for want of a few quarts of some absorbent.

The floor of the stall should not have much inclination—only enough to allow the water to pass off. The more level the surface on which a horse stands, the better.

It is said that "sprung knees" are occasioned partly by standing on a steep floor in the stable. That such a floor is not pleasant for the horse, is clearly seen in the fact that when such a stall is wide, the horse will stand across his stall in order to find the most level position.

Let the horse feel as *naturally* as possible in the stable. He has been furnished with a long neck in order that he may reach down to feed, as he does in the pasture, and not that he may reach up, and pull out a small lock of hay from the rack. Give a horse a manger to feed out of, so that he can enjoy eating, and do not oblige him to steal his fodder from a rack, with narrow spaces, as though he did not deserve his keeping. It is thought that a horse will waste his hay if he is fed from a manger; but he will not if he has good hay given in proper quantities.

The best horsemen say, feed your horse as you do yourself. Give him his breakfast, dinner and supper, and nothing between meals. It is a mistaken kindness that keeps hay continually before a horse. When he has more hay before him than he can eat up clean, he wastes it, or eats more than his system requires.

A horse should have *enough* to eat, and then, if not in use, should stand three or four hours with nothing before him. Such a course of treatment keeps his appetite keen, and he relishes his dinner.

Let him have a generous supply of good bedding. A horse enjoys a good, nice bed as much as a man, and why should he not have it? A good horse deserves it. Because he cannot complain of sleeping in the wet and dirt of the stable, or on hard plank, let no man think that his horse does not appreciate such favors as a good bed. He will lie down during the day occasionally, if he is well cared for. For summer use, saw-dust makes excellent bedding. It is cool, sweet and even; and also keeps the stall in a healthy condition.

A supply of fresh, clean water is indispensable to the comfort of man and beast. I have noticed that my horse drinks the most heartily after eating her supper, about eight o'clock in the evening.

Grooming is one of the civilities of the stable, and ought to be attended to daily. It not only causes a horse to look well, but it promotes health. A faithful groom is equal to two quarts of oats.

Such attention paid to a good horse is by no means like "casting pearls before swine." He who does it, and treats his horse kindly, is sure of his reward.—*Veterinary Journal*.

President Lincoln, though exempted specially by the national tax law from the provisions of the act, has directed to be deducted from his salary, just as if he were not exempt.

Be sure you are right, then go ahead.

## The May Cherry.

*Yellow Fleshed Peaches—White Fleshed Peaches—  
Peaches at South Pass—Apples at South Pass—  
Willson's Albany at South Pass—and Cedar for  
Screen—Evergreens on the Prairies—Deciduous  
Trees on the Prairies—Evergreens make the  
Climate Warmer.*

FLUSHING, Oct. 13, 1862.

M. L. Dunlap, Esq., Champaign, Ills.:

DEAR SIR:—I notice in your April number some statements on which I will make short comments. Kentish Cherry of Downing is the same as the Early Richmond, so called on account of its being found by Wm. Prince, in 1793, growing in gardens at Richmond, Virginia, where he obtained it, and not knowing then its real name, he called it "Early Richmond." The Synonyms quoted by Downing are correct.

Large Early York and George the Fourth Peaches are identical. Early Barnard and Early Crawford are both inferior to Bergen's Yellow peach; all yellow fleshed peaches belong to the Alberge family, and their characteristic is acidity. The Orange Melacoton and Rose Hill Melacoton are, however, exceptions and of excellent flavor. On the other hand, the general characteristic of white fleshed peaches is sweetness. I don't see, among the varieties cultivated at South Pass, many of our best peaches, such as the early and late Admirable, Gross, Mignonne, Bourdine Gorgas, Madeleine, Malta, Nivette, Oldmixon, free and cling, Chinese Honey, Lady Parpam, President, Excelsior, Scotts, Magnate and Nectar; and none of the splendid late clings that ripen the beginning of October, such as the Paris de Pomme, Pavietardif or October Scarlet, Admirable, Tippecanoe and Old Newington; and none of the fine October free stones.

And among the early apples, the five best appear to be ignored, the Blinkbonny, Garretson's Early, Sinequanon and Summer Pearmain, for eating, and Corse's Favorite, the best of all for cooking. The deficiency seems quite as striking in the autumnal and winter varieties. It is to be hoped they will not make as bad selection in pears, as that would be more fatal than with other fruits.

In strawberries the growers are now taking the mistaken lesson in the adoption of the Wilson, as has been previously done elsewhere, while all the older growers have abandoned it; and even Mr. Knox, who puffed it beyond measure, has

ploughed it under. Its utter sourness, and its yielding only one crop of such berries proved too much for longer endurance. That crop, however, was double the quantity that the present new favorite of many, the Triomphe de Gand will produce; the best fields of the Wilson yielding about two-thirds the quantity produced by the Diadem, Victorine, Suprema, Scarlet Magnate, and other really productive varieties.

### RED CEDAR.

I notice you are planting much on the prairies of your State. Plant two to three feet we can supply at six dollars per hundred, or fifty dollars per thousand, which is as cheap as to grow them, and five years are thus saved. Also seeds in any quantity. I can conceive no reason why the hardy pines and spruces should not flourish on your prairies; and also the Honey Locust, Yellow Locust, Abele, Silver Maple, and a multitude of other trees I could name. And these, by the shelter they would afford, would ameliorate the climate, and be especially beneficial in shielding cattle and sheep. Are you aware of the very important fact that, during winter, in the immediate vicinity of evergreen trees the atmosphere is many degrees milder than in the vicinity of deciduous trees, or where there are no trees at all. I advance this as a problem. Solve it who can. I feel that I am competent to expound it, but desire to hear from others.

Yours fraternally,

WM. R. PRINCE.

P. S. I send you the seeds of several beautiful varieties of the perennial *Supinus Polyphylus* of California, whose Alpine mining regions comprise the loveliest floral region of the globe.

—In the February No., page 44, we have traced the history of the May Cherry from Virginia to the West, and back again to New York and now we thank Mr. Prince for this last link in the chain. We think the fact is now fully established that the May Cherry of the West is identical with the Kentish of Downing. And that another fact is also established, that the Early Montmorency, and other varieties have been sent out under the name of "Early Richmond," thus making confusion worse confounded. The May Cherry was introduced into the northern part of this state in '46, the next year after the first edition of Downing Fruits was published, and was well known in Kentucky under the name of Early May for a long time previous; but this fact doubtless did not come under his observation.

The finer varieties of peaches have not been tested at South Pass, nearly all of the old stock of trees having come from St. Louis and Alton, with a few from Rochester. A gentleman who takes a deep interest in fruit culture in our State has ordered from France two hundred trees of the choicest varieties known there. These trees will be handed over to the peach growers at South Pass, for trial.

An immense number of varieties of apples have been planted at that point, but have not yet fruited. It must be recollected that half a dozen years have not intervened since the planting of the new orchards, hence so little is known of other than the varieties found in the old orchards. It would be difficult to make any person believe that a better autumn apple than the Buckingham could be found anywhere. With Keswick's Codlin and Buckingham for summer and autumn cooking, Yellow Bellflower for winter they are quite well content; while Winesaps, White Winter Pearmain, Smith's Cider, Willow Twig and Rawle's Janet do not make a bad list for the table. An article on the culture of strawberries at that point must go over to next month, in which we show that the Wilson will continue popular for some time to come, and that it is more at home there than at any other point.

Red Cedars are abundant at the South part of the State, and cost but a trifle for plants six to eight inches high. We have always fancied that an evergreen shelter was warmer than one of deciduous trees, but attributed it to the density of the foliage. Our farmers are becoming alive to the value of tree planting, and the next ten years will materially modify our climate from this cause.—Ed.

### Fruit Trees.

*M. L. Dunlap, Esq., Editor Illinois Farmer :*

Will you or some of your correspondents furnish, through the columns of your paper, a list of fruit trees for an orchard of 3,000 trees, to be planted in the southern part of the State, for the purpose of raising fruit for market, with a view of obtaining the greatest amount of profit. The orchard to consist of apples, pears and peaches, 1,000 trees of each. The list to specify the number of trees of each variety to be planted.

M. & B.

—Will not some of our readers respond to the above. We do not expect that one person can give the data for the several kinds of fruit, and we shall be just as well pleased to have them re-

ported from different individuals. Our readers are well aware of the fact that in no part of the world is the apple more at home than in Western New York. There we do not hear of tender varieties, or the running out of old sorts; yet at a meeting of the Pomological Society of Western New York, a few years since, in answer to the question, what varieties to plant in a market orchard of 1000 trees, a prominent member replied that he would plant 999 Baldwins, and as to the other tree, he was not sure whether he would set a Baldwin or a Rhode Island Greening; and so general was this opinion that few, if any, would plant less than half to three-fourths of that variety, filling up mainly with Greening. It is well known that these varieties are of little value at the West, from two facts: one is, that they are not hardy in all locations, and in the next place, that the fruit will not keep well; being late fall, and early winter. It is possible that Rawle's Janet, Winesap, Smith's Cedar, White Pippin, or some other variety may hold the same position in the south part of the State as the Baldwin in Western New York; and the same may be said of the pear—while the cherry is already reduced to one leading variety. (Kentish or Downing) May Cherry of the West. It is true that we begin to look for the best, instead of the greatest number of varieties.

The State Horticultural Society, at its late Fair, as will be seen in the report in last number, have, through one of its committees on fruits, composed of the ablest fruit growers in the West, pronounced the Keswick Codlin the best cooking apple for summer; Maiden's Blush for autumn, and Winesap for winter.

We must go one step further, and make the same decision for the table. Let us hear from all parts of the State on this subject.—Ed.

TURNIPS FOR MILCH COWS.—Milo Smith of Northampton, in a communication to the Homestead, made the following statement: "We tried one of our best cows in milk recently, that was fed a half a bushel of turnips a day in addition to her other feed, by weighing her milk carefully for one week. We then left off feeding the turnips, while her other food was precisely the same. She dropped off on her milk from two to three quarts per day, and on returning the feed of turnips, she came back within three days to her full flow of milk. This difference in the quantity of milk, as we sell ours, makes the turnips worth from fifteen to eighteen cents per bushel, and I think they can be raised for much less than that."

The most impudent of all things is a mirror, it is continually casting reflections.

**DRAINING LENGTHENS THE SEASON.**—This fact is of such importance that we copy every illustration meeting our notice. Land that can be worked early in the spring, and put in good order for crops, even in unfavorable seasons, is much more valuable than that subject to *drowning out* with every fall of rain. The editor of the New England Farmer notices an experiment in draining, made by himself, at some length, from which we extract the following :

"A part of the autumn work on our farm has been that of finishing the drainage of a piece of land commenced in 1857. The locality is a narrow valley, surrounded on three sides by higher land, and only the south-east side was then opened. The upland on the edge of the valley was plowed the preceding spring, but so wet was it, that the work could not be done until the 27th of May, and even then with difficulty, so thoroughly soken was the soil. On the following spring, and so on ever since this land has been worked with comfort, and some portions of it even made into garden-beds any time after the 20th of April! At the time of draining, the meadow was dotted with hossock grass, rushes, and skunk cabbage, which all disappeared in the course of two years, without the aid of plowing, re-seeding or heavy manuring; nothing being applied but a very light dressing of composted manure. It will be seen, then, that the season for farm operations on this piece of land has been lengthened in the spring about five weeks! beyond what it was before drainage had taken place. The period of growth and ripening has also been considerably extended. These results, however, would scarcely justify the belief that this land is capable of producing crops such as are matured in a climate several degrees farther south. Far from it. But it will produce and mature the most abundant crops that it would have utterly failed to bring before, and bring them at about one-half the cost of labor that is required on wet and heavy land!"

**CUT OFF THE BACK LEGS OF YOUR CHAIRS.**—I will tell you a secret worth knowing. A thousand things, not worth half as much, have been patented and elevated into a business. It is this: If you cut off the back legs of your chairs so that the back part of the seat will be two inches lower than the front part, it will greatly relieve the fatigue of sitting, and keep your spine in much better shape. The principal fatigue in sitting, comes from your sliding forward, and thus straining the ligaments and muscles in the small of the back. The expedient I have advised will obviate this tendency, and, as I have suggested, add greatly to the comfort and healthfulness of the sitting posture. The front edge of a chair should not be more than fifteen inches high for the average man, nor more than fourteen for the average woman. The average chair is now seventeen inches high; for all, which no amount of slanting in the seat can make comfortable.—*Lewis' Gymnasium.*

**BUTTERNUT STOCK FOR PEACHES.**—The Prairie Farmer states that "an extensive peach grower of St. Joseph, Michigan, lately informed us that he was intending to try butternut stock for peaches quite extensively next year. He is confident of success, claiming that the borer, which is now causing much trouble in that section, will not harm them. We have known of experiments of this kind but have no report of the success after bearing commenced. What have our western tree planters to say of the promise of this stock?"

There can be no doubt of the value of the butternut for stock, especially a stock of boards.—*Illinois Farmer, Sept.*

Well friend "Rural," a stock of knowledge and assurance is a good thing, as well as a stock of butternut boards, and if you are not already *overstocked* with the former, perhaps the following experience of Dr. Hahn, now one of the most prominent physicians of this city, may be of value to you. In the year 1840, this gentleman, then residing in Waterloo, New York, budded peaches upon butternut stock. This was done in the month of July. They lived and grew well, and in due time commenced bearing, and have continued to give peaches nearly every year till now. The borer has not troubled them, and it will be noticed that the life of the peach tree, there usually from five to seven years, has been prolonged to more than twenty years. His method is to go into the grove in July, select young trees the size of one's finger and bud them, letting them remain there till the fall of the following year, when they may be transplanted in the desired location. If the stocks are grown from the nuts in the nursery, bud and let remain in nursery rows the same. The only objection he has found to them is the great height they attain, rendering the gathering of the fruit more inconvenient.—*Prairie Farmer.*

—We should like to see Dr. Hahn demonstrate the above in Chicago, and shall then give in our faith to the fact. Butternut and black walnut have been repeatedly tried as a stock for peaches, and the above is the first intimation of success that we have seen. It is possible that it may be done, but our faith in its practicability is very slight, indeed.

If the Dr. has done it at Waterloo, we see no reason why he might not succeed in Chicago, battling the risk of winter-killing the buds. Some of the Chicago gardeners must have the stocks for the trial.—*Ed.*

**CATAWBA BRANDY.**—Dr. Hsley, of the Evening Courier, in speaking of the effects of this article, says: "It is a curious physiological fact, well known to the residents of the west, but of which the general reader may be ignorant, that the habitual drinking of catawba brandy has an invariably tendency to induce insanity or idiocy."

We should like to know what other kind of brandy the "habitual use" of which will not produce similar if not worse results?

### Rye Converted to Chess.

I have been an attentive reader of the articles in your paper in reference to wheat and rye turning to chess. I will state a fact: In July, 1861, desiring to try an experiment of sowing rye with buckwheat, which I have seen do well and be remunerative, I sowed about four acres with rye and buckwheat. My crop of buckwheat was gathered and yielded well. The rye crop, in about two weeks after, looked well and promised fair.

In September I sowed another lot of six acres with rye, the same seed.

Last spring in looking at the rye upon the buckwheat stubble, it presented a strange appearance, and at the proper season a better crop of *chess in head*, no farmer need have desired. Three-fourths of the field was chess. This was cut green,—fed to the cows, and was eaten with avidity.

The rye sown in September was reaped and gathered in season, and was free from chess.

Another fact under my observation: It is a custom with our farmers to soak their seed wheat in strong brine—the shrivelled, small and blasted grains, together with foul seed, chess, cockle, etc., float and are skimmed off.

A neighbor of mine, preparing to sow wheat, in which was a good deal of shrunk grains, but otherwise clean, soaked it in brine, and the shrunk wheat was skimmed off. Finding that he did not have quite seed enough to finish his lot—there being a small angle in a corner, unsown—he sowed this shrunk and shrivelled wheat, and the next year his wheat crop, except this angle, was free from chess, and his corner of shrivelled wheat was a chess crop, free from wheat.

C.

Morristown, N. J.

We give place to this communication merely to explain how easily all weeds find their way into cultivated crops. A weed is any plant that has small seeds that become mixed with the seed of crops, or otherwise spread in the soil, and that are extremely hardy and spread under adverse circumstances. Out of many thousand native and introduced plants, a very few have become excessively troublesome as weeds, and chess is among the number. The soil may contain millions of minute seed all through it, without constituting a ten-thousandth part of its bulk, and wholly imperceptible on close examination, remaining dormant, as all seeds do, when buried too deep, but springing into vegetation when brought near the surface. Luxuriant crops often keeps such weeds smothered down, till some accident occurs to kill the crop, when the weeds spread upward and take the space thus given to them. Hence, superficial observers and hasty reasoners think that the plants of the disappeared crop have *actually turned into the weeds*.

The seeds of the chess plant require a million to a bushel, and ten thousand, or one-hundredth of a bushel, would seed an acre, one plant to every two feet square,—as we have often seen them cover a square yard when they had plenty of room to grow in. These ten thousand seed would constitute but a two-millionth part of the

soil, and would never be detected till growing. The seeds are also very hardy, and may be scattered in manure, and many other ways. They will grow and bear a few seed when less than six inches high, under a dense growth of wheat and rye, but when anything happens to kill the crop, these little plants spring up and spread in wild luxuriance. Knowing these characteristics, any one could have known by reasoning beforehand, that cases would continually occur among careless farmers, where they would think their crops had changed to the weed—or to any other weed that would alike take its place. Such cases are accordingly occurring daily—they are reported to us very often; and we have no doubt that there are at least a thousand of our readers, and perhaps many thousands, who have often heard just such statements as the one here given by our correspondent. Keeping in view the character of the chess weed, and its readiness to usurp the place of an injured and destroyed crop, there will not be the slightest difficulty in accounting in several different ways, for its abundant appearance, whenever poor, shrivelled or worthless seed is sown; or having started, has been destroyed in any way. It is needless to spend time and space upon the subject, and we are surprised that after it has been so repeatedly and satisfactorily explained, just such cases as we have heard one thousand times, should be so often repeated.—*Country Gentleman*.

—It is probable that three-fourths of the farmers of this State are firm believers in the chess theory, and we would recommend every slovenly farmer to take stock in it, thus throwing from his own shoulders the credit of bad farming.—ED.

TO PRESERVE STAKES AND POSTS.—We very frequently hear inquiries for some process that will prevent stakes and posts from rotting where they are sunk in the ground. The following gives a method at once simple and cheap, and which is worth a trial:

"Quite recently, while walking in the garden with the Hon. J. W. Fairfield, Hudson, N. Y., he called my attention to the small stakes which supported the raspberry canes. The end in the ground, as well as the part above, was as sound and bright as if lately made; but he informed me that they had been in constant use for twelve years! Said I, "Of course they are cyanized?" "Yes," he replied, "and the process is so simple and cheap that it deserves to be universally known, and it is simply this: One pound of blue vitrol to twenty quarts of water. Dissolve the vitrol with boiling water, then add the remainder.

"The end of the stick is then dropped into the solution, and left to stand four or five days; for shingles, three days will answer, and for posts six inches square, ten days. Care is to be taken that the saturation takes place in a metal vessel or keyed box, for the reason that any barrel will be shrunk by the operation so as to leak. Instead of expanding an old cask, as other liquids do, this shrinks them. Chloride of zinc, I am told, will answer the same purpose, but the



blue vitral is, or was formerly, very cheap, viz: from three to six cents per pound."

Mr. Fairfield informed me that the French government are pursuing a similar process with every item of timber now used in ship building, and that they have a way of forcing it into the trees in the forest as soon as cut, ejecting the sap and cyanizing it all on the spot. I have not experimented with it, but Mr. Fairfield's success seemed to be complete.

The process is so simple and cheap as to be within the convenience of every farmer, and gardener even, and I therefore thought it so valuable as to warrant a special notice of it.—*New Jersey Farmer.*

**ABOUT CORNED BEEF.**—When beef is fresh it contains considerable blood, which is drawn out by the brine. If the meat is left in this bloody mixture, it will require a much larger quantity of salt to preserve it, particularly through warm weather. My plan is to make a brine by using for every hundred pounds of beef, five pounds of salt, one-fourth of an ounce of saltpeter, and one pound of brown sugar. This is dissolved in just enough water to cover the meat, and poured upon it. When it has been in this brine two weeks, I take out the meat, let it drain, pour a fresh brine over it, and then it will be good the season through.

The cook who uses corned beef should not be so ignorant or indolent as to delay putting it over the fire until an hour before dinner. A good sized piece requires three or four hours steady boiling to do it justice. Insufficient boiling must be made up for by extra chewing. Always have the water boiling when the meat is dropped in; otherwise the sweetness will be drawn out into the water. A boiling heat hardens the outer surface at once, and thus keeps in the juices which give richness, and which contains most of the nourishment. An excellent way of cooking corned beef is to have a large boiler with a wire or wooden rack on the bottom for the meat to rest over the water. When the water boils, place the meat upon the rack and put on the cover of the boiler with a cloth over it to keep in the steam. The heat of the steam will rise above the boiling point and penetrate the meat and cook it more quickly and better than could be done by boiling.—*American Farmer.*

**THE "AFTER-GROWTH" OF GRASS.**—A distant friend writes: "I have a large quantity of second crop on my mowing fields, and the question is what to do with it. Shall I cut it for hay or feed it off? My stubble fields are also full of young grass and clover, the season having been very favorable to a catch. Is it advisable to let whole growth lay on the ground, or is it better to mow it, or feed it off? If it is to be fed off, what kind of stock shall be turned on?"

In regard to the first of the above questions, we may say, that whether the second crop of mowing-fields should be cut, or fed off, or let alone, depends on various circumstances. If there is, as stated by our correspondent, a

"large quantity" of grass on the ground, it is advisable, even in reference to the land, or to the amount and quality of the next crop, to take off, in some way, at least a portion. If the crop is needed more for winter feeding than for immediate consumption, it may be made into hay. As we have remarked on previous occasions, after-math or rowen hay is, when properly cured, of the very best quality in reference to the production of beef, mutton, or milk. On fields which were mowed early, the second growth is generally large, this season. Most farmers in this section will cut some for hay, besides leaving considerable to feed off. It will be better for the succeeding crop to cut it pretty soon, to give time for the grass to start a little before the frosts sets in. A certain amount of covering for the roots is beneficial; but too thick a coating affords harbor to field mice, which do much injury, and, besides, "smothers out" the grass more or less.

Probably as a general thing, it is better for the land, or for the next crop of grass, to feed off the after-math. On the ground that is not wet, the sward is generally made firmer, even, and the herbage thicker and finer, by the tread of cattle in connection with their grazing. They should not be allowed to leave the ground too bare at the close of the season.—*Boston Cultivator.*

**WINTERING BEES.**—It seems to be an understood fact that bees should be wintered in a warm place; that is, not out of doors in the open air. They should not remain in winter where they are in summer. It is remarkable how many people there are that yet oppose this theory. They refer you to "wild swarms that harbor in trees," where the greatest amount of honey, they say, is found. It is sometimes true about the honey. But it must be considered that bees in general are well-wintered in trees; and bee-keepers may here learn a lesson. It is the tree—the thick sides surrounding the colony—that protects the bees.

The other day in mentioning to a bee-keeper, who never reads, but gets his knowledge from experience, that the books say that bees will sometimes starve in the midst of honey in winter. I was surprised to hear him say, "Yes, sir, I have had them often die that way."

"But what causes it?"

"Well, my opinion is they can't get out of their place on account of the cold. The moment they attempt it they are chilled, and rather than be frozen to death, they will stick together and starve. I have kept my bees buried in the snow, and kept them out of the snow. I shall hereafter keep them in the chesse-room."

"What is that for?"

"There they are dry; and when the weather gets cold I shall warm the room. I shall keep the room dark?"

"You have never tried it?"

"No. But I have seen it tried. I saw it done last winter, and not a swarm of the whole died, but came out clean and fine. Everybody else loss bees that kept them out-doors.—*Val. Farm.*

## The Kirkbridge White, or the Yellow or White June Apple.

Downing describes the Kirkbridge White as follows: "Tree of rather slow growth; an early and abundant bearer. Fruit below medium, oblong ovate, very irregular, ribbed, skin, yellowish white; stalk short and small in a narrow cavity; calyx small and closed; segments long, reflexed; basin narrow; flesh white, tender, juicy, sub-acid; ripe soon after the early harvest, and continues in use for four or five weeks; popular in some sections of the west."

Elliot describes it thus: "Medium in size or rather large; oval; ribbed; tapering equally to each end, and blunt at the ends; skin smooth, pale yellow; stem short; cavity and basin both very narrow; flesh very tender, sub-acid, fine grained; good latter part of summer."

Henry Ward Beecher, in his "Fruits, Flowers and Farming," gives the following:

"Not found in any catalogues but those of western nurseries. The upright, wood strong and stubbed; grows slow while young, but vigorously when fully established; ripens its wood early in autumn; not subject to frost-blight; bears moderately young and is very productive. Its fruit ripens in succession for six weeks from first of July to middle of August, and is peculiarly valuable on that account; color nearly white; it is largest at the base and tapers regularly to the eye, and is ribbed; flavor mild, pleasant acid; flesh melting, and, if fully ripe, breaks to pieces in falling to the ground."

At the meeting of the Illinois State Horticultural Society, held at Chicago in December 1861, this fruit, under the name of Yellow June, was added to the list for trial. The following testimony was given concerning it. Mr. Kimball, of Rockford, said it was very successful in his locality, and a special favorite with train-boys. Succeeded the Red June. Dr. Haskell had seen the same apple under the name of Kirkbridge White. Mr. Beeler, of Indianapolis, said the description was that of the Kirkbridge White of his section. Several knew it as the White June.

At the meeting of the Missouri State Horticultural Society, at St. Louis, in January, 1862, the following testimony was given concerning the Kirkbridge White: Dr. Morse said it was a fine thrifty tree, its fruit good, of fair size, and a fine yellow color. Dr. McPherson had had it in bearing for five years. Its growth was peculiarly beautiful—in the shape of a vase—could get perfect fruit from it every day for six weeks. Mr. Votaw had seen the apple at the mouth of the Meramec and elsewhere, and thought well of it.

Thus much I have been able to find concerning the above apples which I suppose to be identical. The description given by Elliott is not quite in agreement, but otherwise I see no conflict of testimony.

My own experience with it is equally satisfactory as to its merits. It is, and has been for more than a generation, a favorite apple in this locality. It is a hardy, long-lived, and fruitful tree; not large but handsome. The fruit is not large, but nearly always fair, tolerably early and

of good quality. It ripens with me a little after the Red June. It is an early bearer; a tree four years in the orchard has a fair crop this year. It is very prolific; its tendency is to overbear, making the fruit too small for some purposes. I have just gathered thirty barrels from ten trees, leaving a large quantity of over ripe and small fruit which was unfit for shipping. Three barrels of saleable apples I consider a very good yield, one tree with another.—*Val. Farm.*

**SORGHUM CANE FOR ANALYSIS.**—We have before spoken of the desire of the Commissioner of Agriculture to obtain specimens of the new varieties of cane grown on different soils for the purpose of analysis. The following circular has been addressed to the secretaries of county agricultural societies, to obtain their aid in the project:

The chief chemist of this department is now engaged in an investigation of the sorghum, the result of which will be given to the public in the next annual report, and I shall esteem it as a special favor to the department if you will aid him in procuring some specimens, say:

1st. Of canes, packed in boxes, perforated for ventilation. Cut off, merely the roofs, and so much of the tops as are usually rejected, say two or three specimens from different soils. Let these specimens of cane be five to six feet long if the nature of the cane will bear it. Attach to each specimen a card with letters, say "A, B, C, etc."

In referring to each bundle and letter attached, state the kind of cane; where the seed was obtained; the nature or principal composition of the soil in which it was grown, and other interesting particulars connected with the crop.

2d. Procure two or three specimens of crystallized sugar.

3d. Procure the same of syrup, and number or letter each specimen, and give a short account of the manner in which the crystallized sugar and syrup were obtained; and especially, whether any leaf or other crystallized sugar has been added to facilitate the graining of the yield, and if so, what proportion.

Of course these specimens will be fully analyzed by the chemist, and it will be one of his principal aims, to ascertain the kind and composition of soil best adapted to produce crystallized sugar, and that best adapted for the production of syrup or molasses; and in order to aid that part of his investigation, I wish you would be careful to give as correct, and specific date, as to the soil from which each specimen was produced, as you possibly can.

It will greatly oblige this department if you will give this request your kind and early attention.

Very respectfully,

ISAAC NEWTON, Com'r.

Department of Agriculture,  
Wash., D. C., Oct. 27th, 1862.

Let none of us cherish or invoke the spirit of religious fanaticism; the ally would be quite as pestilent as the enemy.

**PURE WATER FOR STOCK.**—A good draught of good water is, probably, as refreshing to beasts as it is to people. But in the month of August, nearly all domestic animals suffer far more than we imagine, for want of good water. Sheep will thrive far better if they can have plenty of pure water; and if milch cows must drink stagnant water wherever they can find it, how is it possible for them to give their usual flow of good milk. It is impracticable for them to do it.

Some people allow water to stand in troughs day after day, many times, and compel their animals to drink it all up. Did such people ever drink water from an old dirty slop pail after it had been allowed to stand in the sunshine for two or three days? Let them try the experiment of such water, and wait for the result, and then they will be prepared to express a correct opinion, whether or not such water is as good for stock, in the sultry days of August, as pure cold water would be.

Water troughs and water tanks should be cleaned frequently, during the hot days of August, and fresh water pumped into them several times during the day.

Milch cows require a vast quantity of pure water in hot weather, in order to produce their usual flow of good milk.—*Country Gentleman.*

**UNQUIET MILCH COWS.**—One of the greatest errors in overcoming cows that are unquiet while being milked, is to whip, beat, kick and brawl at them. This is generally done, and the cow becomes afraid or angry, and, instead of becoming better, grows worse. Milch cows cannot be whipped or terrified into standing quietly and gently during milking. They dislike to be milked, for they know that hard words and hard blows always attends the operation. They dread to see the milker as a little urchin dreads to see the birch rod in the hands of the angry pedagogue when he expects to see it applied to his back. A cow, kindly and properly treated, is pleased to see the milker, gladly awaits his or her approach, and submits with pleasure to the operation of being milked. Every one having experience with cows knows this to be true. But the cow is opposed to a change of milkers; she soon becomes attached to one person who performs the operation, and does not willingly and freely give down her milk to another person; therefore, have one regular milker to certain cows, and bear in mind if you change milkers it is at the expense of a loss of milk and of an injury to the cow. All animals are appreciative of kind treatment and resent abusive treatment. It is their nature or instinct to do this. Therefore, if you would have them gentle and quiet, treat them gently and kindly. See that those who milk them can control themselves, govern their passions, speak low and kindly under any provocation, and soon the cows will learn that they are not going to be abused, and will submit to the operation. Milking should be performed at regular hours, not varying fifteen minutes from one day to the other. No talking or laughing should be permitted at the time, and it should be done as speedily as possible.—*Ex.*

## Wool Growing at the West—General Hints Thereon.

This branch of stock growing is receiving largely increased attention throughout our Western States; partly caused by the war and increased demand for wool consequent, and partly owing to the partial failure and low price of wheat, and to the fact that pork sells low compared with former years. In this increase of sheep, as we predicted in this Journal three years ago, no hindering cause has been found and no new enemy developed. The present year has been a remarkably wet one, and yet sheep in larger numbers than ever before have pastured the prairie in perfect health.


Many farmers almost unacquainted with sheep and wool growing have invested in flocks the past summer. The coming winter may prove a dear "experience school" to them and cause them to wish their money back again.

In sheep growing there are three distinct sources of profit sought, viz: increase of number by natural propagation; growth or increase of size and weight, and annual product of wool. The fattening of sheep for mutton exclusively, constitutes a branch of business by itself.

The three objects above noted are the chief aim of Western sheep growers. The ewe used in breeding should possess as nearly as possible the points of excellence desired in the offspring. They should at least be one year old, of good, strong constitution, have air, exercise and faithful diet. The lamb will thrive finely if the dam be strong, healthy, and a good breeder. Prairie storms are exceedingly severe on lambs, and they require good shelter, dry under foot. Those farmers who have discarded swine for sheep, should bear in mind that a hog reeve and shepherd are quite separate occupations. The hog, though native of a warm climate, will thrive, if well fed, without shelter; the sheep will suffer far more, and its increase frequently perish. The ewe, healthy, well fed and sheltered, will generally realize the fond hopes of the shepherd for increase. Growth afterward is natural, easy and rapid. Good health is necessary, which requires dry pastures and proper food—subjects for study not easily exhausted.

The annual product of wool depends much upon the health of the sheep, both for strength and beauty of fiber and also weight of fleece.

The three sources of increase above named closely looked after, and there will be small chance of failure in making wool or sheep growing a remunerative branch of Western husbandry. We have the summer range without limit, and winter forage superior and more abundant than any other portion of the earth visited by us. Let it no longer be said the prairies are unsuited to the production of sheep and wool.—*American Stock Journal.*

 The following curious epitaph, it is said, may be found in a graveyard in Italy: "Here lies Estella, who transported a large fortune to heaven in acts of charity, and has gone thither to enjoy it."

## Remarks on Summer and Autumnal Planting.

The months of August and September are the preferable periods in the State of New York, and in the States to the North of it, for transplanting the following articles, and the month of September and October for the States adjoining on the south as far as the Potomac, and the months of October and November for the more Southern States.

### STRAWBERRIES.

These if planted at periods above stated, will produce a fair crop the ensuing summer. They should be planted in beds of three feet wide, with four rows of plants lengthwise, and at a foot each way, and allowed to form a dense bed. This width will admit of all the fruit being gathered from the sides. A path of about fifteen inches wide should be left between the beds.

Rhubarb for tarts, of all the large and fine, new varieties.

Asparagus, of the large Dutch and giant varieties.

Horse-Radish, Sea Kale, Globe Artichoke, Madder, and Patience Dock, the latter the best of early spring greens, very hardy and permanent. All these will, when planted thus early, become well rooted and established before winter. They should have frequent waterings during the first two weeks after planting.

Also Bulbous and Tuberous flowers of all the hardy species, such as the different varieties of Hyacinths, Tulips, Lillies of all the fine species and varieties. Crown Imperials, Fritillaries, Crocus, Single and Double Narcissus, Polyanthus Narcissus, Jonquils, Gladiolus Communis, and other hardy varieties, Snowdrop, Snowflake, Ornithogalum, Squills, Bulbous Iris of different kinds, Allium, Amaryllis Aurea, Dens Canis, Calochortus, Ranunculus Anemone, Bulbocodium Vernum, Convallaria, Trillium, Uvularia, Cypripedium, Yellow Aconite, and many other species, and all the magnificent varieties of Herbaceous and Shrubby Pæonies. All these splendid flowering plants, when planted thus early, will become more vigorous, increase more freely and bloom with much greater vigor. It is to be understood, that before planting any of the preceding, the ground should be well ploughed or dug and plentifully manured for the Herbaceous, and moderately so for the Bulbous Flowers.

Fruit and ornamental trees, shrubbery and roses cannot be safely transplanted in this lati-

tude until the 1st of October, and those intended for the south should not be forwarded until the 1st of November, at which time vegetation will have become sufficiently dormant for their safe removal. To the western States inland, they may be safely forwarded the beginning of October.

WM. R. PRINCE & Co.,  
*Linnean Gardens, Flushing New York.*

**THE SHEEP FEVER.**—The high price of cotton and wool has set a great many farmers "a thinking" that it would be a fine thing to have some such articles to sell. In our latitude it is quite out of the question to raise cotton, but not so in regard to wool. Our country is in an eminent degree calculated for the keeping of sheep, as well for the finer grades of Merinoes as the middle woolled or mutton sheep. There is no danger of "running the thing into the ground" at present, and we would discourage no one from going into the business. If you will permit us to alter a little the motto of David Crockett, we would have it read thus: "Be sure you are *ready*—then go ahead." The range for all stock is becoming very limited and circumscribed, and farmers must calculate to keep their stock of all kinds on their own premises. Sheep want generally more care than they get, and men require some knowledge of the business, in order to make it profitable. There are two or three indispensable requisites, before sheep should be bought. In the first place, there should be on the farm at least two pastures of tame grasses, and in the next place the fences on the farm should be such as would make sure the confinement of the flock in the pastures. It is also well for farmers to commence with a small flock of ewes, say good, *strong, common* sheep, and then secure a good, fine-wooled ram, two or three year old, and one who has not been abused or suffered to serve ewes while young. The get of such sheep would be an improvement on the quality of the wool of the old ewes; and the lambs, with proper care, would take a higher grade. By keeping the same ewes and buck another season, quite a nice flock might be raised. Next, pull out all the old ewes, and fatten, with such ram lambs of the first year as may be desirable. Now change your breeding ram and get one of a finer grade, if possible, and keep breeding up, not suffering an inferior ram to serve your ewes at any time.

Sheep are healthier in small flocks than in large ones. But should any ailment befall any of them, they ought to be separated from the flock, because many of the diseases of sheep are contagious.

We would caution our brother farmers who have a touch of the *fever*, and advise them to keep cool. Do not pay extravagant prices for sheep. Ohio, Michigan and Vermont, have sheep to export. Enter into correspondence with some upright man; you may gratify your desire at fair prices; but remember our motto, "*Be sure you are ready, etc*"—*Rockford Register.*

## Our Agricultural Industry—Gleanings from the Census Report of 1860.

### WHEAT.

The quantity of wheat grown in all the States and territories in the year 1849, was 100,044 bushels. The quantity grown in 1859, was 171,183,381 bushels, an increase nearly seventy per centum, or about double the increase of population in the same period. Some of the older wheat growing States—Pennsylvania, Virginia, New York and Ohio—do not show a proportionate increase, owing to the destructive agency of the wheat midge. Fortunately the midge is diminishing where it was formerly most destructive, and wheat growing will soon be resumed in many localities in those States, where for a time it was almost abandoned.

In Illinois, this crop has increased in ten years from nine to twenty-four millions of bushels; in Wisconsin, from five to near sixteen millions of bushels in the same period.

### INDIAN CORN.

This crop for 1849 was 592,071,104 bushels; in 1859 it was 830,451,707 bushels, which is an increase of more than 40 per cent. In a majority of the States this is undoubtedly the most popular crop; it is less liable to failure than any other, and is applied to so great a variety of useful purposes. No important changes have been made either in the varieties cultivated or in the modes of cultivation, except in the substitution of animal for human labor. If we fix the average market value of Indian corn at thirty cents per bushel, we have for the product of 1859, the enormous sum of \$249,000,000, in round numbers.

### COTTON.

In 1849 the quantity grown was 2,445,793 bales of ginned cotton, of 400 pounds each; in 1859 it was 5,196,944 bales of light weight, or in round numbers, 1,000,000,000 of pounds—an increase of more than 110 per cent in ten years; and the ordinary average value of that year might safely be fixed at \$160,000,000.

### HAY AND CLOVER.

The hay crop of 1849 was 13,838,642 tons; in 1859 the quantity was 19,129,128 tons; the average value of this crop may safely be estimated at \$160,000,000, which is rating it at less than nine dollars per ton. This increase of the hay crop in the past decade, is not proportionate to the increase of live stock in the country; but it appears that with better farming, more roots and cut straw and other rough fodder are used, and therefore less hay is required. The hay crop might probably be greatly increased by the careful introduction of the best varieties of grass, upon which subject the department of agriculture may be expected to give some valuable and timely information.

### SUGAR AND MOLASSES.

The product of cane sugar, as reported in 1849, was 237,134 hogsheads of 1000 lbs. each; in 1859 it was 302,205 hogsheads. The product of molasses for the former year was 12,700,991 gallons; for the latter 16,337,080 gallons. From the sorghum and imphee 7,235,025 gallons of molasses were made in 1859; but since that, the increase in the production of that article has been wonderful, so that in the State of Ohio alone, it has been estimated that the product of 1861 will amount to ten millions of gallons, by Mr. Gill, of Columbus, a gentleman largely engaged in the manufacture of the article.

The sum paid for imported sugars in 1859 exceeded \$13,000,000, and in the same season 30,000,000 of gallons of molasses were imported.

The amount of maple sugar made in 1850 was 34,253,436 pounds; in 1860 the product was 38,863,884 pounds. This increase affords pleasing evidence that our beautiful maple groves are not becoming extinct, but in many cases preserved with commendable care.

### DAIRY PRODUCTS.

The quantity of butter produced in the year 1859-60, is set down at 460,509,854 pounds, which is an increase of 46 per cent. on the product of 1849-50. The amount of cheese returned is 105,875,135 pounds, or 339,242 pounds more than the product of 1849 and 1850.

The cheese exported from the United States to other countries is about 15,000,000 pounds annually. If cheese-making was as well understood in our country generally as it is in Europe, the demand would be greatly increased. It is believed that our people suffer immensely by not thoroughly understanding the most approved processes of cheese-making. While many of our most enterprising dairymen supply an article creditable to the country, in Europe, what is termed American cheese, is not purchased with that confidence with which we receive theirs, for the reason that our processes have not reached that perfection which alone contributes to uniformity of excellence and distinctiveness of character. When this point is attained, a taste is cultivated and increase in demand follows, and profits enlarge. An article so nutritious and easy of transportation should, by all means, form a portion of our army rations.

### SHEEP AND WOOL.

The number of sheep returned by the census of 1850 was 21,723,220, and the amount of wool, 52,516,959 pounds. In 1860 the number of sheep returned was 23,317,756, and the amount of wool was 60,511,343 pounds. In addition to the number of sheep above mentioned, as returned by the census, the assistant marshals reported 1,505,810 as their estimate of the number of sheep not included, because not owned by others than farmers; so that the entire number of sheep in the United States, on the 1st day of June, may safely be placed at 26,000,000, and a proportionate amount may be added with propriety to the clip of wool for the same period.



The average price of fine wool in one of our principal wool markets (Boston), for the last thirty-five years, has been fifty-cents per pound; of medium, forty-two cents per pound, and of coarse thirty-five cents.

The average value of the clip of 1860 might safely be put at forty-two cents per pound, thus making the total value of the growth, of 1860, twenty-six and a half millions of dollars.

**A SUCCESSFUL WINTERING OF BEES.**—As the season has come round when the careful aparian looks well to the comfort of his little busy friends, the writer is reminded of his success last winter, and gives his experience for the benefit of those who have as yet no settled plans for the better preservation of their bees during the cold weather.

The writers hives have moveable combs. The size is fourteen inches every way on the outside, and each one is placed by itself on a small platform close to the ground. On the top of each hive are four holes for supers. The cover which goes over the supers is large enough, say fourteen and a half inches in the clear, to slip over the hive, and when the supers are off, covers the hive completely, and still leaves two or three inches space between the top of the hive and the outside cover. (In summer this cover is raised sufficiently to place supers under, and rests upon cleats, which are screwed on the four sides of the hive at any height desired). Last winter, the writer opened one of the holes on the top of the hive, and tacked wire cloth over it, and then put on the cover (or surtout I call it). The opening made in the cover, to correspond with the entrance to the hive when slipped wholly down, is not more than one and a half inches long, and a half inch high. Thus no current of air can blow into the hive, and the moist atmosphere rises through the hole in the top, instead of collecting dampness in the hive.

The writer was never so successful in wintering his bees as the last season. Upon raising the covers in the spring, instead of a dampness of debris, and large quantities of dead bees, the floor was dry, and the caps of the cells lay along in regular order under the spaces between the combs—showing that the bees had not moved much.

The number of dead bees was much less, and evidently those which had died a natural death—not the slick, whole winged ones, but dark, jagged-winged, *hard* workers—perhaps a half tumbler full in each hive.

Though the *size* of the hive is here given, it is not necessary that it should be adopted for the better preservation of the bees. The *principle* can be followed out by using the square box hive, common among farmers. Another advantage in connection with this arrangement is, that if the bees fall short of honey, they can be readily fed.

One of my hives, (about February), had not a drop of honey in it. I filled a tumbler full of plain barely candy, and inverted it over one of the bales, and the bees readily consumed it all. One pound (cost twenty-five cents), carried them through to the time of fruit blossoms, when,

(the weather being favorable), they laid up sufficient to last till white clover came.—*Cor. Bee Journal.*

## Clover—Saving the Seed.

TO THE FARMERS OF THE WEST.

EDS. RURAL NEW YORKER:—As I have a good many inquiries respecting raising clover, and saving seed from the same, I would take this opportunity of giving my mode of operation. I try to cut the first crop and get it off the last days of June, and not later than the 4th of July. The second crop I save for seed, letting it stand untill I think two-thirds at least of the heads are ripe, when I take my reaper, with the platform on, and cut, raking it off in gavils and putting them in rows, so as to save time in gathering. I then let it lay until it gets one or two good showers, and soon as dry, having no barns, (and by the way I would get out the seed out of doors,) I take and make a bottom of rails at least eight inches from the ground—say ten feet wide and forty long, according to the amount of clover. I build the side very square up—if anything a little wide on top—until the last two or three roads, owing to the size of the stack, throwing them in the middle, and top out, good, with coarse prairie hay, or a load or two of corn-stalks, bound up and lapped over, so as to make a sure thing of it. This done, I let it stand until the ground freezes and the weather settles. I then take one of Birdsell & Brockaw's Premium Clover Threshers and Hullers, combined, and make short work of it in preparing it for market.

Our yield in this western country, on an average, is three bushels; I have raised seven. I am sure, as a general thing, our western farmers do not seed one-half enough for the benefit of the land. I know of pieces of land here that never get a load of manure or a coat of clover for ten, and sometimes fifteen years, and consider it a poor way of farming. A good crop of clover seed pays me better than a crop of wheat, wheat at seventy-five cents and clover at \$3 per bushel.

Yours truly,

HUGH HULS.

St. Charles, Ills., Nov. 1862.

**SHRINKING OF HAY AND CORN BY DRYING.**—An exchange states that the loss upon hay weighed July 20th, when cured enough to put in the barn, and again Feb. 20th, has been ascertained to be 27 1-2 per cent. So that hay at \$15 a ton in the field, is equal to \$20 and upwards when weighed from the mow in winter. The weight of cobs in a bushel of corn in November, ascertained to be 19 pounds, was only 7 1-2 pounds in May.

What a world this would be if all its inhabitants could only, with Shakspear's shepherd, "Sir, I am a true laborer; I earn that I wear; I owe no man hate; envy no man's happiness; glad of other men's good; content with my farm."

## Sugar Beet and Sorghum.

ILL. CENTRAL R. R. PRESIDENT'S OFFICE.  
Chicago, Oct. 20th, 1862.

WM. H. VAN EPPS, Esq., President State Agricultural Society, Dixon, Illinois.

MY DEAR SIR:—I presume that you are not unmindful of the efforts now in progress to produce the sugar beet in this State. Mr. William A. Belcher of this city distributed in the spring the best quality of seed, which was imported by him from Germany for the purpose, and given out to some fifty or sixty different parties. Some of the beets have already been sent in, and his chemists have analyzed one or two parcels, which yield eleven per cent. of sugar (sacharine matter)

I believe when the First Napoleon directed the attention of the agriculturists of France to the importance of extracting sugar from beets, that the percentage of saccharine matter then obtained was only three per cent. After many years' experience in the culture of the beet, the most careful selection of seed from the beets that contained the most sugar, the average has been brought up to twelve per cent., while in some special and extraordinary instances, a yield of seventeen per cent. has been obtained. I think we have every reason to be gratified with the first result of Mr. Belcher's interesting and most important experiments, and I hope that your Society will communicate with Mr. Belcher, and lend him your valuable aid in giving to our farmers judicious and active information about the cultivation of the sugar beet. A German gentleman who is cognisant with the sugar refining in Germany has just come out at our suggestion, pronounces the beets which he has seen at Mr. Belcher's the finest he has ever seen, and that he is persuaded that the properties of these beets will produce as fine sugar as any raised in Germany or France.

Mr. Belcher's chemist is so much occupied that he has not time to give proper attention to analyzing samples of Sorghum sent him by a widow in McDonough county, which yields eight per cent. more sacharine matter than any other Sorghum which has been heard from as raised in this State, crystalizing into a very fair article of sugar. It seems to me that this investigation is of the very highest importance, and that if you have a State chemist, he could be employed to the utmost advantage for a couple of months analyzing products, samples of sorghum and beet root, in various parts of the State.

This Company has offered free transportation for all sugar beets which parties may wish to send to Mr. Belcher, and we hope at least to have a hundred tons.

Yours truly,

W. H. OSBORN.

We learn that the result of this year's experiment with the sugar beet is so favorable that large amounts will be planted next season. With the Sorghum for sirup and the beet for sugar, we are like to be independent of our neighbors down the river.

What action the State Agricultural Society will take in regard to the enterprise we cannot say, but with the crippled condition of their funds they cannot do much. The State had ought to place in the hands of this Society at least ten thousand dollars a year to further the interest of agriculture.

The Illinois Central Railroad has always taken a commendable interest in all that pertains to the introduction of new products. Since Mr. Osborn the President has taken up his residence with us, he has let no occasion slip without giving it his aid. It is true that this Company have a large amount of lands to sell, and all these things go to enhance their value. Yet it is so seldom that our corporations who have lands to sell do more than to receive the money, that we attribute no small amount of the interest to them by officers of the road to forward the cause of agriculture, to a personal love of it, and a desire to be generally useful.

The State Society has not as yet fully appreciated the motives of these men, as they ought to have done and met them in the spirit of mutual aid to the good cause, but rather in a dictatorial tone, ignoring their suggestions and demanding of them material aid to use according to their own notions of propriety. With an election of a new Board we shall hope for some change in this respect, and a more efficient programme of operations. The frittering away of means, has not done much to inspire confidence in its officers, and some forward move must be made to re-instate them in the public confidence—strategy is "played out."

Ed.

From the Country Gentleman and Cultivator.

## A Good Substitute for Coffee.

THE GARBANZO—*Cicer arietinum*—I have grown the past season, a quantity of the above species of plant, of which I first obtained the seed of Judge A. N. Morin of Quebec, Lower Canada, he recommending it as a good substitute for coffee.

The plant attains the height of about 18 inches, and branches very much. The seed pods are very numerous, being thickly set throughout the plant, and is altogether quite an ornament to the garden. The seed somewhat resembles the "Java" coffee, and when prepared the same as the latter, it is considered by many nearly equal in its quality. We have given it a fair trial, and deem it a rich, pleasant and healthful beverage—superior to any of the other "substitutes for coffee."

It being very productive, it will require but a small space of ground to produce enough to last a

common family through the year; and in these "hard times" I should deem it good economy to grow enough for our own use. It should be planted in drills two feet apart, and one seed, six inches apart, in the drill. L. NORRIS.

Windsor, Ohio. Nov. 1862.

—Our old friend the "Chick Pea," alias "Illinois Coffee," is again loose—wonder if it will sell this time at half a cent a grain. Go in Mr. Norris, your fortune is made if you don't lack impudence, and judging from the tone of your letter you do not. Send out West by all means.—Here is a broad field for you, as the fools are not all dead yet, though many of them have left us for a time. Ed.

From the Farmer's Advocate.

JERIAH BONHAM—*Dear Sir:*—I enclose you a sample of cotton taken from an unripe boll.—I am trying an experiment with it. I have half an acre growing well. Whether any of it will ripen, I cannot say, but my stand looks as well as any I ever saw in Louisiana or Mississippi. I know how to raise it. The trouble this season has been too much wet for it to ripen soon. If it had been warm and dry, I would have had one picking at least, and possibly I may get it yet. Yours truly, S. S. STRONG.

Dwight, Ill., Oct. 21st, 1862.

**CULTURE OF HYACINTHS IN GLASSES.**—The Hyacinth is the bulb most usually grown in winter in the house, and when properly treated will bloom more finely, and the flowers will continue much longer than in the open air. Culture in glasses and in pots are the most usual methods of growing this beautiful plant in the house.

In culture in glasses the largest bulbs should be selected, as it must be borne in mind that in this method of treatment, the whole substance of the leaves and flowers comes from the body of the bulb, as nothing in the way of nutriment is derived from the water. In selecting Hyacinth glasses the darkest colored should be chosen, as the roots of all plants shun the light. Place the bulbs on the glasses and pour in water until it just touches the bottom of the bulb. Now set the glasses away in a dark cool place, where they may remain for several weeks, or until the roots have reached half way to the bottom of the glasses. When this is the case, remove them to a situation where they will receive a moderate amount of light, and as soon as the leaves show a healthy green color, they may be placed in their final situation, which should be where they can receive the greatest amount of light and plenty of fresh air. The top ledge of the lower sash of a window is frequently used for this purpose, and is a good situation, for here they get the greatest quantity of light, and are kept cool by the air which will always creep in where the two sashes meet. The water will need to be changed once in two weeks, and this should be done without removing the bulbs, as there is danger of

the roots being injured in returning the bulbs to the glass after removal. It will sometimes occur that a slimy matter will collect around the roots. When this is the case, the bulbs must be carefully removed, and the roots washed with gentleness and the utmost care. The glasses should be washed out before replacing the bulbs, which operation must be conducted with judgment and much caution, or the roots will be broken and the plants suffer. The water used in refilling the glasses should always be of the temperature of the room. It is recommended by way of stimulant to the plants to dissolve an ounce of guano in a quart of rain water, and put one teaspoonful of this solution in each glass once a fortnight, after the flowers begin to appear.—*Country Gentleman.*

**PLANTING GRAPE VINES.**—George W. Campbell, of Delaware Grape notoriety, makes the following remarks in his circular:

"I have found very little difference in the growth of vines, whether planted in fall or spring. When planted in the fall, and slightly protected during the first winter, an early start, and usually a more vigorous growth may be expected, than from vines transplanted in the spring. A somewhat elevated situation, and a deep, pervious soil, moderately rich, is best. A calcareous clay loam, well under-drained, will produce very good, healthy vines and fruit, and if abounding somewhat with gravel or pebbles, so much the better. If lime does not exist naturally in the soil, it should be pretty freely supplied; and if the soil is poor, enrich it with any well decomposed manure at hand. Fresh, or partially decomposed manure induces unhealthy growth, and disposes vines to mildew. Low situations, where water can settle and stagnate about the roots, will not answer. Where immediate fruiting of young vines is desired, permit but one cane to grow; stop or pinch off all laterals at one joint from the main stem; keep the vine tied upright, and at the height of four or five feet, pinch off the leading shoot. This plan will strengthen the lower buds, and often give fruit the year after planting."

**FLAX COTTON.**—The Legislature having appropriated the sum of \$2,000 for the machinery to test the experiment of manufacturing flax cotton, to be expended under the direction of the State Agricultural Society, the Executive Committee would call the attention of those interested in the culture and preparation of flax to this subject. The object of the Legislature was undoubtedly to secure a preparation of flax as an economical substitute for cotton, so as to be used on cotton machinery.—*Journal N. Y. S. Ag. Society.*

**Custom House clearances in New York** of domestic produce, for the last week in October, amounted to over five millions of dollars, about half of which goes to Liverpool alone.

## Discussions at the N. Y. State Fair.

## FIRST EVENING.

*Insects—The Grain Aphis, Wheat Midge, &c.*

(From the Rural New Yorker.)

Dr. Asa Fitch, Entomologist to the State Agricultural Society, opened the discussion by reading the following Essay on the Grain Aphis:

*Mr. Chairman and Gentlemen:*—I am requested to preface the discussion, this evening, by presenting to the audience some account of the Grain Aphis—an insect new to us in America, and which, during the past and present year, has been more prominent in the public regard than any other insect.

In the grain fields of Europe this grain aphis has existed from time immemorial. It was scientifically named and described eighty-one years ago, by the distinguished German entomologist, Fabricius, who met with it in fields of oats, and therefore named it the Aphis Avenæ, or the oat aphis, he being unaware that it occurred equally common upon other kinds of grain also.

But our European accounts of it are quite meager and imperfect. About all that we gather from them is, that it is an insect which shows itself upon the grain about the time of harvest, and that in some instances it has been known to be so multiplied, in particular places, as to literally swarm upon and cover the heads of the grain in many of the fields.

These few general facts is all the information which the world has hitherto had of this insect. What becomes of it during the remainder of the year, where, and in what condition it lurks after harvest time, and until harvest time again approaches, had never been investigated. It was remaining for us in this country to trace out its abiding place and its habits during the autumn, winter and spring, and thus complete its history the year round, as we have been able to do within the past eighteen months—under the instructions of this Society, and under the auspices of the State of New York.

In this country, this grain aphis had never been observed, and it was not known that we had such an insect here, until last year, when it suddenly appeared in excessive numbers over all the New England States, and the State of New York, except here in its western section, and also in the adjoining districts of Canada and of Pennsylvania. Throughout all this vast extent of country every grain field was invaded by it; many of these fields were thronged and a portion of them were literally covered and smothered and covered by this insect.

This year it moved westward, making its appearance in the same manner all over Western New York, Canada West, Northern Ohio, and at least a portion of Michigan, as I judge, from the numerous letters which have been sent me with grain-heads containing this insect, and from the notices of it in the public prints—whilst at the East, where it was so numerous last year, so that except in a few localities, it would not have been noticed had not every body been so eagerly searching for it.

But though this insect has only been noticed in this country the past and present years, we do not suppose it has newly arrived upon this Continent. It has no doubt been present in our grain fields heretofore; but in such limited numbers, and so scattered about upon the growing grain, that it failed to be observed. It is seventeen years ago that I began to examine the wheat midge, and in looking at that and other insects upon the wheat, I recollect I have occasionally seen this aphis. But as only two or three individuals of this kind were to be found at a time, I supposed it to be of no importance, and thus gave no attention to it, until it began to appear in such abundance the past year.

Although it is a common habit of plant lice to become extremely numerous, at times, upon the particular kind of vegetation which they respectively infest, we meet with no recorded instance in which one of these insects has been known to become so suddenly and excessively multiplied over such a vast extent of territory as has happened in our country with this grain aphis the past and present years.

I suppose almost every person in this audience has seen these insects, crowded together upon the heads of wheat, of oats, barley, or rye, and has observed that they were a kind of plant-louse, similar to what we frequently see upon the leaves of cabbage in our gardens, and on the apple, the cherry, and other trees. As it resembles these common and well-known insects so closely in its form, its motions and habits, it will not be necessary for me to give any particular description of it.

With regard to the mode in which it injures the grain, I would observe that it has a slender, sharp pointed bill or trunk, which it holds under its breast when this implement is not in use. With this it punctures the leaves and stalks of the grain and sucks their juices. It therefore has no occasion to leave the particular plant on which it is born, as it always has an ample store of nourishment directly under its feet. Hence, it has no use for wings to carry it, like other insects, from place to place in search of food. It needs wings for only one purpose, namely, to enable it to emigrate to fields of grain which are unoccupied, in order to start colonies in them. Only a small portion of these insects, therefore, acquire wings; and these fly away from the winter grain to plant their race upon the spring-sown wheat and oats.

The latter part of June, when the grain has advanced so that the heads or ears begin to put forth, two most remarkable changes occur in this insect, whereby it begins to become another creature, a different species, in the middle of summer from that which is seen in the spring and autumn.

One of these changes is in its habits. Before the heads appear, it lives singly, scattered about upon the leaves and stalks of the grain, and the young lice, as fast as they are born, leave their parents and wander away. But no sooner are the heads protruded from their sheaths preparatory to blooming and growing the kernels of the grain, than this aphis wholly forsakes all the other parts of the plant and becomes congrega-

ted upon the heads—evidently because the juices which the plant elaborates for the growth of its flowers and seeds are much more nutritious, more dainty and palatable to these insects, than are the juices which circulate in the leaves and stalks. They here fix themselves upon the base of the chaffs which envelop the kernels, and inserting their beaks, they suck out the juices which should go, first, to grow the flowers, and after that to fill and perfect the kernels. And now, the young lice which are born, instead of scattering themselves and traveling away, settle down closely around their parent, crowding as compactly together as they can stow themselves. Thus it comes to pass, that when these insects are numerous, as we have recently had them, in many of our grain fields, scarcely an ear can be found which has not a cluster of these lice around the base of almost every kernel, all with their *long* bills inserted therein, pumping out the juices which should go to swell and perfect the seed. Thus, this grain aphid from being a solitary insect, wandering about singly upon the leaves and stalks, becomes a gregarious insect, clustered together in flocks, and remaining fixed stationary upon the lower or butt ends of the kernels.

At the same time another change, equally remarkable, takes place in the color of these insects. So long as they nourish themselves on the coarse juices of the stalks and leaves, and leaves, their bodies are all of a grass-green color. But when they come to feed on the more delicate juices of the flowers, they begin to bear young of an orange color. One of the grass green insects having stationed herself at the base of a kernel, the next day, in the group of little ones around her, a yellow one will occur, all the others being green like their parent. A day or two later, as the nourishment she derives from the leaves becomes dissipated from her body and replaced by that now obtained from the kernels, half the young she produces will be of this yellow color. And still later, all the young are yellow, no green ones being any longer born. And the older ones after a time dying and disappearing, all these insects some weeks before harvest time, become changed to a yellow color, their hue inclining more to red in some and to yellow in others.

It is truly curious that this green insect, thus, on coming to feed on the juices which grow the flowers, begin to produce young of a gay yellow color similar to that of the flowers.

By depriving the kernels of a portion of the milky juice which should go to swell and mature them, this insect causes the ripened grain to be more or less shrunken and light of weight.

Rye, however, grows so rapidly and ripens so early, that it outstrips this aphid in its increase, and thus sustains no material injury from it. Winter wheat, ripening more slowly, experiences more injury. But the crops which ripen the latest, and when this aphid has become multiplied to the greatest extent, namely, spring wheat and oats, become the most thronged and sustain the greatest injury.

Let us next inquire how it is that this insect is able to become so suddenly and so excessively multiplied as we have had it, in the Eastern part of our State last year, and here in its Western part this year.

I may observe that a hundred years ago it was a current opinion among men of science, that certain insects and other creatures pertaining to the lower orders of the kingdom were generated spontaneously. But more recently, when these instances of supposed spontaneous generation came to be closely investigated, one after another of them were found not to be such. So that at this day the scientific world wholly discards the theory that there is or can be any such thing as spontaneous generation. All living things descend from parents; and it is by a pairing of the sexes that young are produced and that each species is continued in existence—some classes of animals bringing forth their young hatch.

Insects are of this latter kind. They are all produced from eggs. But in the generation of the plant lice, we meet with one of the most remarkable anomalies which we anywhere find in the works of nature. These insects bring forth their young alive, at one time, and they lay eggs at another time. All the plant lice which we see upon our fruit trees during the spring and summer are females, and these do not produce eggs, but living young, which nature, in a few days, and (wonderful to tell!) they are fertile, without any intercourse of the sexes. It is only when cold weather and frosty nights arrive, that males are produced. The insects then pair, and the females thereupon lay eggs. The eggs remain through the winter, to be hatched by the warmth of the following spring. The young from these eggs grow up and commence bearing living young, no males and no eggs being produced, except as the closing act of their operations in autumn.

Such are the general facts with regard to the generation of the insects of this aphid group. And I had supposed it would be the same with this grain aphid. Some of you may have been present and heard the remarks which I made on this subject at our Fair at Watertown a year ago. I stated that the eggs of this insect would probably be found late in autumn, scattered about upon the leaves of the fall sowed wheat and rye—which eggs would hatch with the warmth of the following spring, to start the insect upon the grain again this year. But when frosty nights arrived last autumn, and when the aphid on the apple trees was found paired, and the females were busy depositing their eggs, to my surprise nothing of this kind occurred with this aphid upon the grain. The mature lice continued to produce young ones, until they and their young became congealed upon the leaves of the young grain by the advancing cold of the season. And in this state they were buried beneath the snows of winter, and with the warmth of the ensuing spring they were thawed, and returned to life again.

To be better assured upon the subject, I placed some of these insects on grain growing in flower-pots and kept during the winter in a warm room. In this situation they continued alive and continued to bear young through the whole winter season.

Thus I have watched this grain aphid this year round, so closely, that I am perfectly assured no eggs were laid and no males were pro-



vuced. Occasionally an individual was noticed, varying somewhat from the others, and which I have therefore suspected might be made; but, on imprisoning such specimens in vials over night, I have invariably found young lice with them next morning.

When, and under what circumstances males occur, if they do occur, is yet remaining to be discovered. At present it seems as though these insects might go on forever, producing young, without any intercourse of the sexes.

Finally, with regard to the fecundity of these insects, I would state that those which have no wings, and which remain on the stalks of grain on which they are born, are much more prolific than those which have wings and wander abroad. By enclosing them separately in vials, I found the winged females quite uniformly gave birth to two young lice in a single night, whilst the wingless ones produced four in the same time. We frequently see young lice produced in the day time, but fewer appear to be born then than during the night. The winged ones are also much slower in coming to maturity. I placed several young lice the morning after they were born upon grain growing in a flower pot, and on the third morning afterwards I found four little ones around each of them, showing that the wingless ones come to maturity in three days. It will thus be seen with what prodigious rapidity these creatures multiply. They almost double their numbers daily. A single one producing four young daily, and these becoming equally prolific when they are three days old, her descendants, in twenty days, if all live, will number upwards of two millions. This will serve to explain to us how it is that this insect becomes so excessively numerous upon the grain at harvest time, as we have seen it.

As they multiply so rapidly, it is evident no vegetation which they infest would escape destruction from these plant lice, if nature had not herself provided most efficient means for checking and subduing them. We accordingly find that these insects are preyed upon and consumed by other insects, to a greater extent than are any other kinds of injurious insects wherewith we are molested. There are whole groups and tribes of predaceous insects which subsist exclusively upon the plant lice of different kinds.

A tribe of very small Ichneumon flies, named Aphidius, are parasitic destroyers of these insects—puncturing and thrusting an egg into the body of the aphid, from which hatches a minute worm which feeds within the aphid till it kills it. I have found two species of these parasites destroying the grain aphid.

Another most efficient destroyer is the Lady Bug or Coccinella, of which there are numerous species, all of which are continually searching plant lice to feed upon, these being the sole nourishment of the lady bug, both in its larvæ and its perfect state.

In addition to these are the Synphus flies, the golden-eyed flies, and the lace-wing flies, all mortal enemies to the different kind of Aphid.

By such means it is that these plant lice live upon the grain as on other vegetation, are usually but a transitory evil—these their foes and destroyers,

always gathering around them wherever they become numerous, and multiplying until they overbalance and subdue them.

Some one asked for a description of the Lady Bug. Dr. Fitch described it as follows:—It is about the size and shape of half of a small pea, of a yellowish red color, with round black spots upon it.

*Question.*—Is it poisonous to animals?

Dr. Fitch knew a single instance when swine had been pastured in a field where the lady bug was numerous. All of the herd were taken sick and some of them died. The swine were removed from that field to another, and such as were so removed recovered. Dr. F. said that it was possible that the swine were poisoned by eating large quantities of the lady bug; for if it is taken in the fingers and crushed, an acrid juice is emitted, which is doubtless poisonous, inasmuch as it is the insect's only means of defence. He had thought it possible that this particular herd of swine might have been poisoned by it.

*Question.*—Is there any prospect of the Aphid becoming a permanent pest in the country?

*Answer.*—I think not. Its enemies are too numerous for that. Not more than a single year at a time, will they be likely to ravage in a single locality. As before said, they seem to be migrating Westward.

*Q*—Is the midge a permanent pest; is it plenty here at all seasons?

*A*—There is no doubt that the midge is plenty in all parts of the country. The character of the season governs its ravages. If the latter part of June is wet, look out for the midge; if dry, there is no danger. In dry weather it cannot subsist on the uplands; it returns to the lowlands.

T. C. PETERS—We are fast reaching the maximum of former years, in the amount of wheat sown in Western New York, and it is an important matter to us to know how to avoid the ravages of the midge. Do you recommend thorough culture?

Dr. Fitch—Strong growing wheat will produce despite the midge. Yes, I do recommend thorough culture as one of the preventives of the ravages of the midge; also of the Hessian fly and other insects.

*Q*—What is the effect of the work of the Aphid upon the grain—upon the kernel?

*A*—The insect extracts the juices from the plant, which aid in developing and maturing the kernel. This diminishes the size of the grain—sometimes virtually destroying it, for the substance is almost gone.

Mr. GEDDES, of Onondaga, does not agree with the existence of the midge. He doubts if the midge exists in as great numbers one year as another, or if they are present at all; for prior to the past six years he had failed to get a crop of wheat for some years on their account; while the past six years he had grown it successfully. His success, he thinks, is not due to dry Junes, but to the fact that the midge had disappeared. He doubts, too, if success is due to superior culture; for he used to summer fallow all his land;

now he turns it over and seeds after barley, and oats, &c., &c.

T. C. PETERS—So far as white wheat is concerned, the theory of the effect of the season upon the ravages of the midge upon it, is correct. But the Mediterranean is the only variety that can be grown now safely. He thinks the white wheat has very much degenerated.

Other gentlemen present coincided with him in this matter and united in asserting that the best mode of redeeming white wheat was to change the seed. It was further agreed that the Mediterranean had greatly improved by cultivation—that it was “bleaching out.”

Mr. BISHOP, of Wyoming, asked if early or late sowing had not something to do with checking the ravages of the Aphis?

Dr. FITCH replied, yes. Its ravages are greatest on the late sown wheat. Late sowing is not advised, if the object is to avoid its ravages. The same remark applies conversely to the midge. It does not so seriously affect the late, as the early sown wheat.

Pres't CORNELL—Have you observed the Aphis in the ground around the roots of the barley?

Dr. F. had so discovered it.

Mr. GEDDES—Why is it that the midge should have appeared one year, and not doubled the second and tripled the third, &c., &c. He thought the midge was disappearing.

Dr. FITCH said there were two successive years when the midge disappeared, and then the third year appeared again, and was very destructive. He does not think it was because the midge passed away from the country, but because the season was not favorable to its development—or at least not favorable to its operations on wheat—it passed to some other grain.

At this point there was a rambling conversal discussion upon the relative value of different varieties of wheat. Much of this the reporter was unable to hear. But he heard enough to establish the fact that there were many present who believed the Mediterranean the safest and best wheat to sow; that it was improving in character, while the white wheat of the Genesee Valley was deteriorating. A few claimed that better flour could be made from the Mediterranean than from any other wheat.

—We would call the especial attention of our wheat growing readers to the above, as there is no doubt that we shall at no distant day receive a visit from this pest of the wheat field.—Ed.

President Lincoln is reported to have said, a few days ago, “that the whole energies of the Government were now devoted to the opening of the Mississippi river.” This declaration, in connection with the doubt about the object of the recent expeditions, it is thought, may be significant.

EGYPTIAN HULLESS BARLEY.—While in Illinois a few days since, we were shown a specimen of the above grain by Rev. B. L. Lumbard, who resides a few miles west of Henry, in Marshall Co. Mr. L. purchased the seed two years since in the city of Boston, at \$3 per bushel. He raised about two hundred bushels this season, which he will endeavor to distribute among the farmers of Illinois and Iowa for seed next season. It has very much the appearance of good rye, and it is said, will make very good bread. Mr. L. informs us that it received little or no injury from the bugs which ravaged the wheat fields of that section to such an extent the past season. Its weight is about 70 pounds per bushel measured. We think it a valuable acquisition to the Northwest. The wheat fields of some portions of our State have been rendered comparatively worthless this season by the bug, and it behooves our farmers to be on the alert to find some crop which will withstand the ravages of that insect. Barley is now worth more than the first quality of wheat, in our towns upon the Mississippi river; and farmers who are lucky enough to have a large quantity on hand, are now receiving the benefit of their foresight. Our farmers *must* abandon the idea of growing rich by raising wheat alone. They must diversify their crops and their labors. We would advise our farmers to send for, at least, a small quantity of the hullless barley. The sooner applied for, the better, as the farmers of Illinois will soon use up the amount which Mr. Lumbard has, and we do not know where it can be obtained except from him. He can be addressed at Henry, Marshall county, or Bradford, Stark county, Illinois.—COR. ED.

REMARKS.—We have received a specimen of the above grain, and which any one can examine by calling at our office, and which fully answers the description given above, as far as we are able to judge from appearance.—*Iowa Homestead.*

FALL SOWING OF ANNUAL FLOWER SEEDS.—There are some annuals which do better when sown in the fall than in the spring. Every person at all observant of flower gardens, must have noticed that certain annual flowers come up in spring from seeds self-sown the previous year; and these often make very vigorous plants, and bloom a month or so earlier than those of the same sort sown in spring. This shows that it is a good practice to sow some seeds in the fall. Of those which are found to succeed well so treated, we note the following:—Adonis, Double Balsam, Larkspur, Candytuft, Clarkia, Erysimum, Mimulus, Perilla, Forget-me-Not, Portulacca, Petunia, Coreopsis, Sun-flower, Calliopsis, Drummondia, Delphinium ajacis humile, Escholtzia, Nigella Hiepanica, &c. These may be sown any time in the latter part of August and to the middle of September.

Dr. Johnson wisely said: “He who waits to do a great deal of good at once, will never do anything.” Take the hint; take it home and work. Whatsoever your hands find to do, do it.

### Cellars on the Prairies.

To those settlers on our prairies who have been used to a good dry New England or New York cellar, the want of it is seriously felt. It is not, however, difficult to have a good one and at moderate expense where stone or brick can be procured at reasonable cost. Experience has proved, we think, that cellars made in part or wholly above ground, are preferable to those sunk below the level of the soil. Where wholly above, the walls should be built up seven feet, and the ground raised on all sides up to the underpinning, sloping off gradually, or in terraces as desired. On one side an opening in the bank should be left for a doorway, the walls being continued out each side of the entrance. The entrance would then be on a level with the ground and make it very easy to get in heavy articles.

The walls should be built of brick or stone, as they can be best procured. An experienced builder, L. W. Walker, of Champaign county, estimates the comparative cost of brick and stone as follows: In the first place, where stone can be procured at \$9 per cord, it is cheaper than brick at \$6 50 per thousand, and the walls much more durable when laid. A cord of stone is estimated by builders to lay 100 feet of wall.

#### HOW TO BUILD THE WALL.

The depredations of rats are increasing at a rapid rate on our prairie farms and in the ordinary way of building cellar walls they soon undermine and ruin them. To prevent this, in commencing the wall the foundation should be of flat stones if possible, laid so as to project at least one foot outside of the wall, and laid firmly in cement. This will head off the rats as they descend by the outside of the wall and thus dig under. This projection completely baffles them in their undertaking.

#### CELLAR BOTTOMS.

As a further guarantee against rats, and to facilitate cleaning and dryness, should be composed of concrete made of two parts of coarse sand, one part of water, lime or cement; gather up all fragments of stone from the wall, pound into pieces as for Macadamizing, and spread over the bottom of the cellar, then pour the sand and cement mixed with water over the whole, say six inches deep. It quickly sets and becomes almost as hard as iron. It will bear washing like a floor, and is the best bottom that can be made, as it never moulds or decays.

If the ground for the building spot is so located that the cellar could be sunk in the ground a foot or two, it would, in most instances, be preferable, but the manner of building the wall should not be neglected.—*Prairie Farmer*.

**SHELTER FOR STOCK.**—It is a well authenticated fact that it requires only about two-thirds as much feed to winter an animal well stabled, than it does when such animal is exposed to all the winter storms. This, in point of economy, ought to be sufficient inducement for every man who

has a cow or other animal, to take good care of them. But then, we read somewhere in the good Book that "a merciful man is merciful to his beast," and add to this the satisfaction a man can take, while sitting by his cheerful fire, or sleeping in a comfortable bed, to know that his animals are equally comfortable, according to their wants of food and shelter. It takes but little time and expense to erect a board or straw shed, and the man who neglects to build one, and suffers the poor brute to take shelter under the fence corners, ought to be put out in such a place for one night at least, when we have a real "Nor-wester," driving sleet and snow. We opine he would build a shed "on the double-quick," as soon as he would be "off duty" for that night.—*Rockford Register*.

**CATCHING RABBITS.**—One of the greatest pests the orchardist has to contend with in winter, especially when near timber, is the rabbit. A member of the Missouri Horticultural Society, at a recent meeting, gave his plan for disposing of this pest:

"To prevent rabbits barking trees, I catch them. My method is simple: I take a box, tolerably large, cut a hole on the edge of the box, and fasten inside the hole a piece of tin or sheet iron by a rod on two staples, so that when the box is turned on the ground on its mouth, the piece of tin hangs from the top of the inside; the tin is kept up by a small piece of stick. When the rabbit enters, the tin falls, and the rabbit is left inside. It needs no bait, you can't keep rabbits out of a hole."


**APPLE TREE BORER.**—*SAPPERDA BIVITATUS.*—To keep off the sapperda, or borer, is simply to head the trees low enough to shade the trunk. There is no use of fooling with wires to reach the individual, for his hole is generally so tortuous as to rarely be able to reach him; moreover, they never retire to the woody part of the tree until the damage is done. Soft soap is very good for the body of the tree, but the first rain washes it off, and never reaches the borer. Since I have adopted this plan the borer has entirely disappeared from my orchard. In vol. 9, page 254, I gave my views on the subject of the borer at some length, and I have no reason to change them since.—T. V. P., *Mt. Carmel, O.*

**THE LOCUST FOR BEE PASTURES.**—A correspondent of the *Bee Journal* says: "In setting out ornamental trees it is surely worthy one's attention to have regard to their honey-producing power, and to select, with this end in view, those blooming at different times, rather than one kind, or those blooming at the same time. In Southern Ohio, bees, some years, gather a large portion of their surplus honey from the locust. Their industry during the yield from the locust is surprising. Where the tree grows in great numbers, they almost abandon all other sources of supply."

### A Norwegian Home.

The house in which these country people reside are not altogether unlike the small log-cabins of the early settlers on our western frontier. I have seen many such on the borders of Missouri and Kansas. Built in the most primitive style of pine logs, they stand upon stumps or columns of stone, elevated some two or three feet from the ground, in order to allow a draft of air underneath, which in this humid climate is considered necessary for health. They seldom consist of more than two or three rooms, but made up in number what they lack in size. Thus a single farming establishment often comprises some ten or a dozen little cabins, besides the large barn, which is the nucleus around which they all center; with smaller cribs for pigs, chickens, etc. and here and there a shed for the cows and sheep, all huddle together among the rocks or on some open hill-side, without the least apparent regard to direction or architectural effect. The roofs are covered with sod, upon which it is not uncommon to see patches of oats, weeds, moss, flowers or whatever comes most convenient to form roots and strength to this singular overtopping. The object, I suppose, is to prevent the transmission of heat during the severe season of winter.

Approaching some of these hamlets or farming establishments during the summer months, the traveller is frequently at a loss to distinguish their green-sodded roofs from the natural sod of the hill-sides, so that one is liable at any time to plunge into the midst of a settlement before he is aware of its existence. Something of a damp, earthy look about them, the weedy or grass-covered tops, the logs green and moss-grown, the dripping eaves, the early northern and chilling effect, and fill the mind with visions of long and dreary winters, rheumatism, colds, coughs and consumptions, to which it is said these people are subject. Nothing so wild and primitive is to be seen in any other part of Europe. A silence almost death-like hangs over these little hamlets during a great part of the day, when the inhabitants are out in the hills attending their flocks or cultivating small patches of ground. I passed many groups of cabins without seeing the first sign of life, save now and then a few chickens or pigs rooting about the barn-yard. The constant impression was that it was Sunday, or at least a holiday, and that the people were either at church or asleep. For one who seeks retirement from the busy haunts of life, where he can indulge in uninterrupted reflection, I know of no country that can equal Norway. There are places in the interior where I am sure he would be astonished at the sound of his own voice. The deserts of Africa can scarcely present a scene of such utter insolation.—Harper for August.

 Bread has just been made from corn 1800 years old, found at Pompeii. Moreover it is said that a batch of eighty-one loaves from a Pompeian oven, oddly preserved from the heat of the lava by a thick coating of ashes, has also been discovered in the recent explorations of the ruins.

### THE ILLINOIS FARMER.

BAILHACHE & BAKER.....PUBLISHERS

M. L. DUNLAP EDITOR.

SPRINGFIELD, DECEMBER, 1862.

### Editor's Table.

This is the month of comparative idleness to the farmer. A month of a thousand small cares, but of little really hard labor,—but stop, let us see. Everywhere, except in the great corn zone, that is the case; but here the busy huskers are afield, and the golden ears are flying through the frosty air to a lodgment in the huge waggon bed ready to be hauled to the crib; but this season good progress has been made with the husking before December comes in with its frosty days.

The want of help has admonished all to begin in good season and we'll have most of them attended to the morrow.

Farmers have done little in the way of tree planting, though some attempts have been made in that direction. Our orchard on the "Leyden" farm has been reinforced with nearly twenty-five hundred trees, so as to make it a good commercial orchard for that part of the State, sixteen miles from the heart of the Garden City. We had intended to set at least a thousand here, but have not had time to set the first one, and must be content to wait until spring.

A large number of commercial orchards will be set in the south part of the State in the spring, containing a large percentage of the peach and pear. Within the next ten years, this State, as a whole, will be better supplied with fruit than any other of the western States.

**SORGHUM MAKING.**—At Champaign, Messrs. Finch & Co. have been making sorghum syrup at

the rate of nearly or quite one hundred and fifty gallons per day, running one of Gate's Steam Evaporators—night and day. They have cords of it yet to work up, while several lots have been left standing in the field without a prospect of working up.

ENLISTED.—Mr. Geo. P. Upton, the local editor of this paper, obeying the Divine injunction, has taken unto himself a wife. The ceremony occurred last evening, and immediately thereafter the happy couple departed for a trip east. For particulars, see marriage notices. We welcome him to the ranks of the regular army.—*Chicago Tribune*.

—Last spring we spent a couple of weeks with George at Cairo and Island No. 10. George was then an enthusiastic army correspondent, and bent on going to New Orleans. But the "do-nothing" policy was too much for him, and after sweltering on the decks of the gunboats as they lay lazily dreaming of Vicksburg, and along the lower waters of the river, he became disgusted with naval matters and we are not surprised at his taking up arms in the infantry. We hope the little responsibilities that may fall to his lot, will not mar his temper or interfere with his reports of the doings in the great city. Let us know when you get settled down to housekeeping and we will send you something for the kitchen.

FRUIT TREES BY THE MILLION.—In the card of O. B. Galusha, our readers will recollect that the types printed "million," for "thousand" making a slight difference. A dealer in trees not a thousand miles from Douglass county, taking the thing in earnest, made an order on Galusha for a million apple trees, proposing to pay on receipt of the trees. Mr. G. can say that he has had the largest order for trees from one dealer in the county. When it is recollected that this dealer hails from the county that cast such an enormous vote for the location of the county seat, it is not to be wondered at that an order for a million of apple trees was considered but an everyday occurrence at the nursery of our friend Galusha. In addition to this he wants five million cuttings of the White Willow. Pretty good for Douglass County.

Let us see how these things would look after being set out. The apple trees would make ten thousand orchards of a hundred each. This county is composed, if we recollect right, of nine townships. This would give each township

over a thousand orchards, or about four to each eighty acre tract, and the Willows would set a belt of over five thousand miles, a pretty good beginning, to say the least. If every county had a man of such large capacity, the State would soon be filled with orchards and timber belts.

The above will not sensibly diminish the stock of Mr. G., and customers can send in their orders as usual, but he declines to fill orders of a million at present. He writes us that the White Willow Cuttings are going off like hot cakes.

AMERICAN JUTE.—The author, H. Howson, has sent us a pamphlet on the culture of the *Hibiscus Moscheatos* or *Pulastrus*, called American Jute. Mr. J. thinks it superior to the Indian Jute.

It grows in swampy land. We shall want to see more in regard to it before deciding on its value for the prairie sloughs.

COMSTOCK'S SPADING MACHINE.—This machine is now on trial by us Nov. 22d, and proves to be a practicable implement. We shall give it further trial and report the result in the next number of the FARMER.

For old land it cannot but prove desirable, as it will spade three feet wide and eight inches deep with three ordinary sized horses. The work is fully equal to that done with a spade.

WHITE WILLOW.—The demand for this Willow is on the increase. Several million of them have been already sold. As a million will set one thousand and eighty-nine miles of fence, we can have some idea of what effect it will have on the appearance of the State within the next three or four years. We have no doubt that over four thousand miles will be set next spring. To form a section into forty-acre lots, it will take eight miles, including half of the outside fence, requiring about forty-two thousand cuttings, which even at the present rates, is no large sum to pay out for permanent fences on a farm of a section.

SHEEP FOR SANGAMON COUNTY.—Last week Wm. McCoy, ten miles west of Springfield, passed our sanctum with nineteen hundred sheep purchased in Michigan.

The sheep are of fine wool, and cost three dollars and six cents a head on the average, to which nearly fifty cents will be added for the



cost of feed and expenses in driving. This flock will make a respectable addition to the already large and numerous flocks in that rich agricultural county. When they reached this place they had been thirty-eight days on the road, which will give some idea of the slow movement of a large drove of sheep, a speed only equalled by that of some of our Generals when after the enemy.

GARNET CHILI POTATOES.—We have something over a hundred bushels of the above potatoe, which we will sell for seed at one dollar a bushel, delivered at the Station free of charge. Sacks to be returned or paid for. Also, a few bushels of the Purple Meshannock at the same price.

The above are two very valuable varieties, the first as among the most productive of table potatoes, and the other as the best in quality of old, for spring and summer use.

COST OF COAL.—Coal has taken a most wonderful upward tendency of late, much to the dissatisfaction of consumers. At the Saint Johns mines, the price has went up a dollar a ton or ten dollars on the car load of ten tons, making it now twenty-seven and a half dollars the car load. Add to this twenty-one dollars and twenty cents freight, and you have some idea of the cost of fuel for the green-house and other fires. A year ago coal cost us at the door, three dollars and sixty-two cents a ton, now five dollars and eighty-seven cents—a difference of one dollar and twenty-five cents a ton.

CLOSING OF THE YEAR.—The third volume of the ILLINOIS FARMER since we assumed its conduct, is now before our readers. That these three volumes contain many errors of omission we very well know, but from the time at our command that could be devoted to its pages, we are content to know that these omissions have been unavoidable and beyond our control. To do justice to the paper the whole of our time should be given to it, but on the contrary at the best, we can but take short snatches of time for its advancement.

A distance of near ninety miles lies between us and the publishing house, which will account for many delays, as well as typographical errors that were overlooked by the proof reader.

In the conduct of the FARMER it has been our aim to make the work practical and useful. In

this respect we leave it for our readers to decide. We have no high ambition than to advance the well being of the cultivators of the soil, and to them we appeal to sustain the publishers in continuing the paper here in the great heart of the State. Our task is now done for the year 1862, and we part with our readers, hoping to not only take them all by the hand, but many more when the new year shall ring its chime out on the frosty air of January, and we again set out on our voyage of the twelve periods that mark our visits to the homes of our readers.

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Selected from many hundred bushels; and the completion of our railroad to Rockville will enable us to fill and forward promptly all Cash Orders with which we may be favored, at the very low price of \$5 PER BARREL for eastern funds

RESPONSIBLE AGENTS WANTED in every county, town, and village, to sprout small lots on halves. Farmers can club together and buy or sprout our potatoes in shares, and thus secure good plants for themselves free of cost.

THE SWEET POTATO CULTURIST, giving full directions for Sprouting, Planting, Cultivating, and Keeping, will be furnished gratis to Agents and Customers; and to others by mail, post paid, for twenty-five cents in stamps. Address,

J. W. TE OK,

